

University of Denver

## Digital Commons @ DU

---

Electronic Theses and Dissertations

Graduate Studies

---

2020

# Portraits of Professional Collaboration: Faculty-Librarian Teaching Partnerships

Carrie L. Forbes

Follow this and additional works at: <https://digitalcommons.du.edu/etd>



Part of the [Curriculum and Instruction Commons](#), [Higher Education Commons](#), [Higher Education and Teaching Commons](#), and the [Information Literacy Commons](#)

---

Portraits of Professional Collaboration:  
Faculty-Librarian Teaching Partnerships

---

A Dissertation

Presented to

the Faculty of the Morgridge College of Education  
University of Denver

---

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

---

by

Carrie L. Forbes

August 2020

Advisor: Dr. Paul Michalec

©Copyright by Carrie L. Forbes 2020

All Rights Reserved

Author: Carrie L. Forbes  
Title: Portraits of Professional Collaboration: Faculty-Librarian Teaching Partnerships  
Advisor: Dr. Paul Michalec  
Degree Date: August 2020

### **Abstract**

Many regional accrediting organizations for higher education have embraced information literacy as a key component for both student success and student learning outcomes. Through embedded librarianship practices, librarians are now taking a leading role in developing and promoting users' information literacy skills and in adopting an active classroom teaching approach. Faculty-librarian team teaching is a best practice for integrating information literacy into the higher education curricula, but the extant research has largely focused on the barriers to collaboration. Using Walsh and Kahn's (2010) model of "collaborative working" as a conceptual framework, this dissertation explores the qualities and characteristics of four faculty-librarian teaching collaborations in higher education through the use of portraiture methodology.

## **Acknowledgements**

Reflecting on my doctoral journey, I am overwhelmed with appreciation for all the love, support, and encouragement from my colleagues, friends, and family. I would first like to thank Dr. Paul Michalec for his unwavering patience, mentorship, and guidance as my advisor. I could not have accomplished all of this without him. I would also like to thank my committee members, Dr. P. Bruce Uhrmacher and Dr. Krystyna Matusiak for their support. I am also grateful to my participants for their willingness to share their co-teaching stories and experiences, which made this work come alive in such a meaningful way. Finally, I would also like to thank my family for all they have done to support and encourage my long educational journey.

## Table of Contents

Chapter 1: Introduction .....	1
Statement of the Problem .....	4
Purpose and Rationale for the Study .....	6
Conceptual Framework .....	8
Research Questions .....	9
Study Significance .....	9
Definition of Key Concepts in the Study .....	10
Summary .....	12
Chapter 2: Literature Review .....	14
Defining Collaboration .....	15
Theories of Faculty Collaboration in Higher Education .....	16
Kezar’s developmental model of collaboration in higher education .....	16
Walsh and Kahn’s social academy .....	18
Faculty Collaboration in Higher Education .....	19
Characteristics of collaborative faculty relationships .....	19
Motivations, barriers, and facilitators for faculty collaborative work .....	22
Team teaching .....	28
Faculty-Librarian Collaboration for Information Literacy .....	37
Teaching role of librarians .....	39
Motivations, barriers, and facilitators for faculty-librarian collaboration .....	40
Embedded librarians .....	48
Summary .....	51
Chapter 3: Methods .....	54
Why Portraiture? .....	55
Portraiture as a Method .....	58
Context .....	59
Voice .....	60
Relationship .....	61
Emergent themes .....	62
The aesthetic whole portraits .....	62
Goodness .....	63
Participants .....	63
Data Collection .....	66
Interviews and observations .....	68
Data Analysis .....	70
Informed Consent and Confidentiality .....	72
Criteria for Research Quality .....	73
The Researcher’s Role .....	77
Summary .....	77
Chapter 4: Margaret and Martina—The Symphony .....	79

The Metaphor of the Symphony .....	81
The Co-Teaching Relationship as a Symphony.....	83
Pedagogy as a Symphony .....	88
Session one with Margaret.....	89
Session two with Martina.....	91
Session three with Martina.....	93
Session four with Margaret.....	97
Summary.....	98
 Chapter 5: Donald and Dorothy—The Dance.....	100
The Metaphor of the Dance .....	102
The Co-Teaching Relationship as a Dance.....	103
Co-Teaching Pedagogy as a Dance.....	109
Session one with Donald and Dorothy.....	110
Session two with Donald and Dorothy.....	114
Summary.....	117
 Chapter 6: Jane and Alice—Yin and Yang.....	118
The Metaphor of Yin and Yang.....	119
The Yin and Yang of the Co-Teaching Relationship.....	121
The Yin and Yang of Co-Teaching Pedagogy.....	127
Session one with Jane and Alice.....	128
Session two with Jane and Alice.....	132
Session three with Jane and Alice.....	135
Summary.....	137
 Chapter 7: Julia and Eric—Cartographers .....	139
Cartography as a Metaphor.....	140
The Cartography of the Co-Teaching Relationship .....	142
Cartography as Pedagogy .....	146
Session one with Julia and Eric.....	147
Session two with Julia and Eric.....	150
Session three with Julia and Eric.....	153
Session four with Julia and Eric.....	155
Summary.....	159
 Chapter 8: Discussion—Cross-Case Analysis of Themes .....	160
Themes.....	160
Strength of personal relationships.....	161
Habits of communication.....	163
Co-mentoring and co-learning.....	164
Power and Authority .....	165
Course ownership and grading.....	166
Curriculum as collaboration.....	168
Motivations and Social Structures .....	170

Students as the motivation. ....	171
Time and effort. ....	174
Summary of Findings.....	174
Chapter 9: Discussion and Recommendations for Practice .....	177
Create Defined Course Loads for Librarians.....	177
Incentivize Co-Teaching Practices.....	178
Embed Co-Teaching as an Element of Core Curriculum.....	179
Embed Academic Librarians into Research-Focused Courses.....	180
Limitations.....	180
Suggestions for Future Research .....	182
References .....	184
Appendices.....	207
Appendix A: Interview 1 .....	207
Appendix B: Interview 2 .....	209
Appendix C: Interview 3 Joint Interview .....	211



## **Chapter 1: Introduction**

Rapid technological advances have resulted in an exponential increase in the amount of available information and have forced academic librarians to change their practices. The increasing popularity of learning management systems, new ways of communicating research, and the transformation in scholarly publishing have also posed new challenges for librarians. Most notably, library and information professionals are rethinking and redefining their roles in terms of addressing faculty and student needs (Goetsch, 2008; Sinclair, 2009). The ever-increasing volume of digital information and the constant development of tools to generate and access information requires information professionals to operate as both information consultants and facilitators to learning (Shank & Bell, 2011).

In addition, several other factors have led information professionals to reconsider their role in the learning process. These factors are the result of the increased competition among universities for developing successful graduates, the need for advanced research skills development for students (Bewick & Corral, 2010; Peacock, 2001), and the adoption of changes in learning and research organizations (Bezot, 2013; Sinclair, 2009; Skov & Skærbak, 2003). Information professionals are faced with the challenge of understanding these new and emerging user needs and of facilitating a strong collaboration between the academic faculty, students, and information and instructional technologists within the institution. Shank and Bell (2011) note that “librarians can and

should be integral, educational partners as well as a catalyst for students' knowledge enrichment and intellectual inquiry" (p. 106).

In this context, the role of librarians as educators is proving to be more important than ever. Indeed, information literacy skills have become an essential tool for active participation in society and for lifelong learning. Moreover, these skills can lead to many opportunities to obtain knowledge. As a result of these opportunities, many librarians have begun to advocate for self-directed learning. Librarians are taking a leading role in developing users' information literacy skills and in promoting an active classroom teaching responsibility (Julien & Genuis, 2011; Kemp, 2006). At the same time, many regional and some program accrediting organizations have embraced information literacy as a key component in both student success outcomes (e.g., graduation and retention rates) and student learning outcomes (e.g., how well students learn throughout their program of study). As more information in different formats becomes accessible, many higher education institutions and accrediting organizations view information literacy, with its emphasis on the location, application, and evaluation of information, as a vital element of critical thinking and analytical skills (Saunders, 2007). In fact, the Middle States Commission on Higher Education used the definition of information literacy from the Association of College and Research Libraries (ACRL) as the basis for their accreditation standards related to information literacy. The expectation is that information literacy should not be relegated to the library as a supplement to the general education curriculum but that librarians and teaching faculty must work together in the planning, teaching, and assessing of these skills (Saunders, 2007). In addition, the Association of

American Colleges and Universities (Association of American Colleges and Universities [AAC&U], 2013) considers information literacy to be an important learning outcome as part of high-impact educational practices for liberal education.

Research from the past 20 years also demonstrates the host of organizational benefits that result from educational collaborations—greater efficiency, effectiveness, and increased participation in decision-making (Haskins, Liedtka, & Rosenblum, 1998; Kanter, 1994; Senge, 1990; Whetten, 1981; Wood & Gray, 1991). Perhaps most important for higher education institutions, it has been shown that collaboration can also enhance student learning (Knefelkamp, 1991; Love & Love, 1995). Several studies of particular collaborations, including interdisciplinary teaching (Conway-Turner, 1998; Smith & McCann, 2001), learning communities (Lenning & Ebbers, 1999; Smith & McCann, 2001), community service learning (Eyler & Giles, 1999), academic and student affairs collaboration (Kezar, Hirsch, & Burack, 2002), and faculty and librarian teaching partnerships (Covone & Lamm, 2010; Matava, Coffey, & Kushkowski, 2010; Muir & Heller-Ross, 2010; Olivares, 2010; Rudasill, 2010; Shepley, 2009; Tumbleson & Burke, 2010a) demonstrate that they enhance student performance, such as grade point average, persistence, and learning outcomes, such as problem solving and interpersonal skills.

However, in general, institutions are not structured to support collaborative approaches to learning, research, and organizational functioning. Such collaborations struggle, at times, to become institutionalized because higher education institutions work in departmental silos and within bureaucratic, hierarchical administrative structures.

Campuses across the country have attempted to develop a host of initiatives (e.g., service learning and learning communities) to improve education—on the edges—without taking on the challenge of reorganizing, only to find these entrepreneurial efforts thwarted by the traditional structures and processes. In addition, interdisciplinary academic programs (e.g., environmental studies, women’s studies) have difficulty being successful within rigid, traditional disciplinary structures. Much has been written about the barriers to collaborative work, particularly in the literature on student and academic affairs collaboration, but little has been written about how to foster positive collaborations within higher education, particularly between librarians and faculty for teaching (Martin & Murphy, 2000).

### **Statement of the Problem**

In 1989, the American Library Association (ALA) Presidential Committee on Information Literacy identified information literacy as a key competency for citizens in the information age (American Library Association [ALA], 1989). To address information literacy at the postsecondary level, ACRL published the *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries [ACRL], 2000) and the *Framework for Information Literacy for Higher Education* (ACRL, 2016). These standards identify the knowledge, skills, and concepts that postsecondary students must possess to be successful in higher education and to be lifelong learners in an information age. ACRL defines information literacy as “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in

creating new knowledge and participating ethically in communities of learning” (ACRL, 2016). Collaboration between faculty and librarians and the integration of information literacy into the curriculum are identified as best practices for information literacy programs in higher education (ACRL, 2016). Recent literature supports the argument that integration at the curriculum level through collaborative teaching partnerships is the best avenue for ensuring that information literacy is integral and not tangential to students’ learning throughout their academic career (Brasley, 2008; Lindstrom & Shonrock, 2006; Montiel-Overall, 2005; Rockman, 2004; Snively & Cooper, 1997; Winner, 1998).

Partnerships between librarians and faculty members are especially important to attempts to integrate information literacy into the curriculum because faculty members in the disciplines are the primary developers of curricula in higher education. In institutions where librarians have faculty status and/or sit on curriculum committees, it is often the case that they are not the most powerful or influential decision-makers in the curriculum development process (Kvenild & Calkins, 2011). Despite this limitation, faculty-librarian collaboration to integrate information literacy into student learning occurs in higher education, and there are many examples of these efforts in the library and information science literature (Kotter, 1999; Lindstrom & Shonrock, 2006; Mounce, 2010; Raspa & Ward, 2000). At the same time, the literature indicates that integrating information literacy through faculty-librarian collaboration can be difficult (Lindstrom & Shonrock, 2006; Shane, 2005). For example, Kempcke (2002) noted that curriculum-level faculty-librarian collaboration has not had widespread acceptance in the academy.

Kempcke (2002) also noted that librarians have often failed to convince faculty of the importance of information literacy “despite their most eloquent and persuasive cajoling” (p. 531). His observation illustrates that information literacy collaboration in higher education is a complex and sometimes controversial issue. It also indicates that it cannot be assumed that faculty members and other professionals will engage in collaborative work solely because it is perceived as a “good thing” (D’Amour, Beaulieu, Rodriguez, & Ferrada-Videla, 2005). The literature alternates between a portrayal of faculty-librarian collaboration as good and necessary and as a challenging proposition. This lack of agreement mandates more research to help faculty, librarians, administrators, and other stakeholders to better understand the nature of faculty-librarian teaching collaborations.

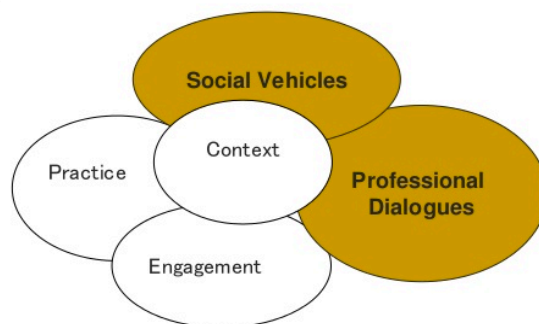
### **Purpose and Rationale for the Study**

Most extant discussions of faculty-librarian collaboration in the library and information science literature are written from a “how we did it” perspective (McGuinness, 2006) and offer little insight into faculty-librarian collaboration as a social and professional experience. While authors have used various conceptual and theoretical frameworks to examine faculty-librarian collaboration experiences in the context of information literacy or library instruction (Given & Julien, 2005; Ivey, 2003; Montiel-Overall, 2005), in-depth studies about the nature of faculty-librarian relationships for successful teaching partnerships are relatively rare. Much is still not known about faculty-librarian teaching collaborations. Themes in the literature on faculty-librarian collaboration often focus on the negative aspects of collaboration, such as barriers and

negative stereotypes of librarians and faculty. New perspectives and research questions are needed to expand upon those that have already been identified. Doing so will facilitate the development of new themes, which could help a new, positive image of faculty-librarian teaching collaborations to emerge.

In this dissertation study, I use Walsh and Kahn's (2010) model of "collaborative working" as a conceptual framework to explore the qualities and characteristics of faculty-librarian teaching collaborations in higher education. Specifically, I create portraits of the qualities and characteristics of four teaching collaborations, with a particular emphasis on the roles of dialogue and social structures. Faculty-librarian collaboration is an issue of critical importance to professional practice. Sheble and Wildemuth (2009) argue that it is important to pose research questions that arise from professional practice in library and information science in order to better understand how practices can be improved. As the primary champions of information literacy in the academy, librarians who seek to collaborate with faculty members to integrate information literacy into student learning must understand faculty members' experiences with teaching collaboration. Faculty members must also understand how librarians perceive and experience collaboration. Given the increased need for collaboration at all levels in higher education, this study, designed to describe and better understand positive faculty-librarian collaborations as a phenomenon, can have significant implications for the professional practice of librarianship and the professional practice of college and university teaching.

## Conceptual Framework



**Figure 1: A Stratified Model for Collaborative Working in Higher Education**

Walsh and Kahn (2010) currently provide one of the only models for higher education that examines the nature of collaborative relationships in the academy. Based on Kezar's (2005) developmental model of collaboration in higher education, Walsh and Kahn (2010) describe collaborative working in higher education as a complex, multilayered, stratified model with five relational aspects (Figure 1). *Social vehicles* describe the social structures that underpin any collaboration. These structures concern both relationships between individuals and groups and the practices of the members involved. Therefore, social vehicles enable professional dialogue, engagement with individuals or organizations, and the work itself. The *practice* constitutes the most visible aspect of a collaboration, as carried out within a given context, and it provides the main reason to come together. In their discussion of practice as an element of the model, they consider how approaches to practice impact collaborative work and how practice may change as a result of collaboration. *Engagement* at a personal level is dependent on both individuals' interest in a collaborative project as well as their ability to participate. The



level of engagement each person brings to the teaching partnership can have an enormous impact on the overall success. Critical to any collaborative effort, *professional dialogues* include the ideas of professionalism and discourse. Sachs (2003) talks about collaboration as a process of joint decision-making that requires “time, careful negotiation, trust and effective communication, where all parties are learners and in which the outcome is improved professional dialogue” (p. 32). Finally, *context* considers how the unique nature of various disciplines and higher education have an impact on collaborative teaching. Much of the complexity of collaborative work stems from the interactions between these layers, as evident in the use of overlapping circles, within the given context of higher education. Social vehicles facilitate dialogue. Practice provides a focus for people to come together and to engage with each other.

### **Research Questions**

The research questions for this dissertation study were as follows:

1. What are the qualities and characteristics of faculty-librarian teaching partnerships?
2. How does dialogue impact faculty-librarian teaching partnerships?
3. How do social structures impact faculty-librarian teaching partnerships?

### **Study Significance**

No extant studies of faculty-librarian teaching partnerships in higher education have been conducted using portraiture to study collaboration as a professional experience between members of different professions (i.e., college/university teachers and librarians) who share a common interest in achieving student learning outcomes. Knapp (1998) noted that “collaboration among professionals from different specializations calls for a

broad vision of professional roles, an understanding of multiple professional ‘languages,’ a clear conception of collaboration itself, and a set of appropriate skills” (p. xi.). Walsh and Kahn (2010) further argue that new knowledge and new research cannot be created without on-going collaborative partnerships across the academy. In *The Collaborative Imperative: Librarians and Faculty Working Together in the Information Universe*, Raspa and Ward (2000) define collaboration as “the passionate pursuit of knowledge in dialogue” (p. 6). It is important to learn together about collaboration, about the personal and professional characteristics of those involved, and about the resources and skills needed to make collaboration successful (Kezar, 2006). Walsh and Kahn (2010) explain:

Academic collaboration . . . is necessarily epistemological in its implications. But, . . . collaborative work is—in the most generous sense—pedagogical in character. For those involved in a collaborative venture will, ipso facto, learn from each other; and so, tacitly, will teach each other. (pp. xvii-xviii)

A core tenet of professional collaboration is the need for professionals with different educational backgrounds and professional values and practices to communicate, work, and learn together to provide better integrated service to the communities they serve (Mostert, 1996; Walsh & Park-Taylor, 2003).

### **Definition of Key Concepts in the Study**

The following definitions informed the research questions, methods, and conceptual framework of this study. They were developed based on concepts identified in the literature, as cited for each definition.

1. Interprofessional collaboration in the information literacy context: A process of communication and decision-making in which faculty and librarians use their separate

and shared knowledge to integrate information literacy into teaching and learning in higher education (Bailey, Jones, & Way, 2006).

2. Collaborative learning: Construction of meaning and making sense of information and knowledge in collaboration with others. This type of learning includes learning together about collaboration, the personal and professional characteristics of those involved in the collaborative project, and the resources and skills needed to make collaboration successful (Kezar, 2006; Montiel-Overall, 2005; Raspa & Ward, 2000).
3. Professional dialogue: Interactions and exchanges of ideas between professionals working together. These exchanges facilitate professional learning and knowledge generation (Walsh & Kahn, 2010).
4. Professional practice: The way in which professionals perform and carry out their professional responsibilities, especially within the context of their knowledge, skills, expertise, and the standards and values of their professional field or academic discipline (Kezar & Lester, 2009; Walsh & Kahn, 2010).
5. Professional socialization: During the formal education process, the development of skills, knowledge, professional behavior, and career commitment in preparation for professional practice (Waugaman, 1994).
6. Information literacy: “The set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (ACRL, 2016, p. 8).

7. Embedded librarianship: Dewey (2005) coined the phrase “embedded librarian,” and since then a number of definitions have emerged. Shumaker and Talley (2009) defined an embedded librarian as focused “on the needs of one or more specific groups, building relationships with these groups, developing a deep understanding of their work, and providing information services that are highly customized and targeted to their greatest needs” (p. 9).
8. Team teaching: Davis (1995) provides this succinct definition of team teaching: “All arrangements that include two or more faculty in some level of collaboration in the planning and delivery of a course” (p. 8).

### **Summary**

In summary, this research study used portraiture to identify the qualities and characteristics of four faculty-librarian teaching partnerships. Moreover, this study is important for five reasons. Foremost, it focuses on team teaching partnerships of faculty and librarians for information literacy, an area in which there remains considerable controversy over the best way to collaborate to teach students the needed skills. At the same time, this dissertation addresses two areas where there is a dearth in the literature: (1) embedded librarianship in the form of faculty-librarian teaching partnerships and (2) the elements of successful teaching collaborations between individuals from different professions. Additionally, because team teaching remains an elusive practice in higher education, the study of faculty-librarian teaching partnerships may help with the development of co-teaching practices across higher education. Finally, this study

highlights the “goodness” in faculty-librarian teaching collaborations, counteracting the negativity and failure disproportionately presented in the current scholarly literature.

## Chapter 2: Literature Review

As I used Walsh and Kahn's (2010) model for collaborative work as the framework for this dissertation, this chapter is organized around the *context*, *practice*, *engagement*, *professional dialogues*, and *social vehicles* related to faculty-librarian teaching partnerships in higher education. First, I begin with a review of the theoretical models on collaboration underpinning this study. To provide an understanding of *context* and *social vehicles*, I then discuss the current state of collaboration within higher education, including the characteristics of faculty collaborative relationships, the common motivations, benefits, and barriers to collaboration. I also cover team teaching as a form of collaboration. As the basis for faculty-librarian collaborations focuses on the *practice* of integrating information literacy into the curriculum, this chapter also includes a review of the literature on the importance of integrating information literacy into the curriculum in higher education as well as the characteristics of faculty-librarian collaborations. Finally, to understand what *engagement* and *professional dialogue* look like in these relationships, I include a review of the theoretical and empirical library and information science literature on faculty members' and librarians' perceptions of and experiences with collaboration in the information literacy context in higher education, including team teaching in light of the concept of embedded librarians.

## **Defining Collaboration**

Collaboration has been defined and studied in education, library science, organizational studies, business, sociology, psychology, political science, health care, social services, and many other fields. It has different meanings even within a single field (Austin & Baldwin, 1992). Some define collaboration according to the purpose of the activity and the extent of emphasis on the product or process (Walsh & Kahn, 2010). Others describe collaboration metaphorically, using references to intimate relationships, sports, biology, or construction work (Creamer, 2003; Kochan & Mullen, 2003). Teamwork, cooperation, coordination, networking, partnership, interprofessional, multidisciplinary, interdisciplinary, and transdisciplinary are just some of the terms used to describe collaborative working relationships. Walsh and Kahn (2010) and Austin and Baldwin (1992) distinguish between coordination, cooperation, and collaboration. Austin and Baldwin argue that although the terms cooperation and collaboration are used interchangeably, they are different. They assert that collaborators work closely together and share responsibility for goals and outcomes, whereas those who cooperate work primarily toward individual self-determined goals. At a basic level, collaboration can be defined as two or more parties learning and working together in a mutually beneficial relationship with shared decision-making to achieve a shared goal or outcome (Austin & Baldwin, 1992; Cook-Sather, 2001; Leathard, 2003; Walsh & Kahn, 2010). No definition of collaboration is comprehensive enough to encompass all manifestations of this phenomenon; thus, collaboration can be best understood by examining its characteristics

within the specific environments and contexts in which it takes place (Austin & Baldwin, 1992), such as collaboration in higher education.

### **Theories of Faculty Collaboration in Higher Education**

Kezar (2005) and Walsh and Kahn (2010) have developed the most prominent organizational models of collaboration in higher education. Those models depict collaboration at a broad organizational level, and they underscore the social context in which faculty collaboration and other types of collaboration can occur in the academy. While my study focuses strictly on the model developed by Walsh and Kahn, I begin with a discussion of Kezar's model since it served as a foundation for Walsh and Kahn's model.

**Kezar's developmental model of collaboration in higher education.** Citing the lack of organizational models of collaboration for higher education institutions, Kezar (2005) adapted the corporate models of collaboration developed by Doz (1996), Kanter (1994), Mohrman, Cohen, and Mohrman (1995), and Ring and Van de Ven (1994) to develop a three-stage developmental model of collaboration based on a case study of four higher education institutions that she identified as exemplars of organizations that support collaborative work. In Kezar's model, eight core elements across three stages of development enable and create a campus culture of collaboration. In stage one, called "Building Commitment," external pressures, values, learning, and campus networks are critical to establishing a strong argument and narrative for why collaboration is important. In this stage, in order to secure buy-in and inspire colleagues to collaborate, change agents are needed to educate the campus community about the benefits of



collaboration. There must also be a context for collaboration and strong support from external sources (e.g., accreditation guidelines). Moreover, the values of student-centeredness, innovation, and egalitarianism must be a part of the campaign to effect organizational change toward becoming a collaborative institution. In stage two, “Commitment,” senior administrators show strong leadership and support by making it a priority to promote and model collaboration. They also develop campus networks and a mission statement that establishes the institution’s commitment to collaboration. Those actions are key to making collaboration an integral part of the institution and not a just an organizational or management fad. In stage three, “Sustaining,” structures must be present that create physical and intellectual space for collaboration (e.g., central organizational units for collaboration, centers and institutes) as well as budget and accounting systems and information technologies. In addition, reward systems, especially tenure, promotion, and incentives, are needed to support and formally recognize collaborative work.

Kezar (2005) found that learning was especially critical in the first and second stages and that external pressures were most influential in the second phase. Relationships among a campus network, or a critical mass of supporters and proponents of collaboration, were the most important element in the model. These change agents and champions of collaboration are needed to spread the message of change to their colleagues and to lead by example by engaging in collaborative projects themselves, thereby generating more collaboration on campus. The salience of relationships and networks in Kezar’s model underscores that collaboration is essentially a social process

(Walsh & Kahn, 2010). Kezar argues that in comparison to business or corporate environments, where it might not be unusual for collaboration to be initiated by mandates, the importance of networks in establishing collaboration might be unique to higher education professionals, who are more motivated by peers than by mandates or outside influences.

**Walsh and Kahn's social academy.** Like Kezar (2005), Walsh and Kahn (2010) also emphasize the salience of relationships in building and sustaining collaboration in higher education organizations. Grounded by theoretical literature on human social activity, Walsh and Kahn's theoretical model of collaboration in higher education is based on the premise that the academy is essentially a social organization and as such is conducive to collaboration. The model consists of five overlapping domains: social vehicles, practice, engagement, context, and professional dialogues.

*Social vehicles* are the social structures that underpin collaborative relationships and provide stability across social actions. These structures are events, patterns of behavior, and practices that enable professional dialogues and engagement among organizations and individuals. *Practice* is the way in which individuals and groups collaboratively plan and carry out their work. *Engagement* refers to the level of interest, commitment, effort, energy, and participation that collaborators bring to a joint project. *Context* refers to the situational environment in which collaboration takes place in the academy. *Professional dialogues* are the discourses in which professionals engage as they exchange ideas that lead to professional learning and knowledge generation. Walsh and

Kahn assert that professional dialogues and social structures are indispensable because new knowledge and new research cannot be created without them.

### **Faculty Collaboration in Higher Education**

Three main topics in the broader literature on faculty collaboration in higher education are relevant to this dissertation study: (1) research on the characteristics of faculty collaborative relationships; (2) motivations, barriers, and facilitators for faculty collaborative work; and (3) team-teaching experiences in higher education.

**Characteristics of collaborative faculty relationships.** According to Austin and Baldwin (1992), effective faculty collaboration is associated with personal attributes such as the following: good communication and negotiation skills; the ability to lead, inspire, resolve conflict, and develop consensus among collaborators; and an understanding of roles in the collaborative relationship. The frequency of faculty collaboration is related to academic discipline, gender, and other factors. For example, high-performing faculty members collaborate early in their careers and often (Austin & Baldwin, 1992). Faculty members participate in various forms of intra- and inter-organizational collaboration, such as service learning, partnerships with industry, K–16 partnerships, joint ventures with other educational institutions or organizations, academic and student affairs collaboration, and international partnerships (Austin & Baldwin, 1992; Eddy, 2010; Holley, 2009; Kezar et al., 2002). However, faculty collaboration is most frequently discussed in the literature within the context of disciplinary and interdisciplinary research and publication, primarily with other faculty members (Austin & Baldwin, 1992; Holley, 2009). Baldwin and Austin (1995) noted that faculty collaboration is more common in

fields with strong research paradigms and shared concepts of professional identity. Moreover, collaboration might be standard practice in fields such as the natural sciences; members of that academic community might be more likely to agree upon and share similar viewpoints about the field. In fields where collaboration is less common, collaborators may be challenged by the prospect of negotiating shared understandings of the discipline (Baldwin & Austin, 1995).

The role of the discipline in faculty collaboration raises an important point about the impact that disciplinary frameworks or paradigms have on faculty collaboration. Creamer (2003) interviewed 31 faculty members to examine the link between an inquiry paradigm and the process of collaboration among faculty trained in different disciplines. An inquiry paradigm is a “basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (Creamer, 2003, p. 448). Creamer found that collaborators can share the same inquiry paradigm but differ on practical aspects of collaboration: (a) the reasons for engaging in inquiry, (b) the values brought into the investigative process, (c) the nature of knowledge and how it is accumulated, (d) quality standards for the work that is produced in the collaboration, (e) negotiation of the “voice” that partners use in their collaborative writing, and (f) the role of academic training in the collaborative project. She also observed that the primary distinctions between collaborators who share the same worldview were not personal characteristics or identity but rather how they thought about the world and how they analyzed events and investigated problems.

These findings are consistent with Creamer's (2004) research on disciplinary and interdisciplinary faculty collaboration and differences of opinion. She found that faculty members do not necessarily view differences of opinion as a barrier to collaboration. Rather, experiencing a difference of opinion can be an opportunity for faculty collaborators to more deeply engage with complex problems in a way that does not impede the collaborative process. Creamer concluded that "a shared worldview and familiarity with each other's expertise developed over time mitigate disciplinary differences among long-term collaborators" (p. 566). She attributed collaborators' differences of opinion to relational dynamics, such as shared worldview and a respect for and familiarity with each other's expertise.

The collaboration imperative in higher education today implies an expectation that faculty members will increasingly need to work within and across disciplinary and departmental boundaries. Facilitating institutional change to support collaboration across disciplinary and institutional boundaries is important. Holley (2009) argues that there is an inherent tension between disciplinary boundaries, academic departments, and collaboration. She also asserts that inadequate processes for awarding tenure and promotion to interdisciplinary scholars is a major obstacle to producing interdisciplinary work. Interdisciplinary scholars "cultivate collaborations with individuals from multiple fields of study . . . and also achieve cultural milestones . . . that are not unique to a particular discipline" (p. 80). Organizational research centers, learning communities, and policy guidelines for hiring, promotion, and tenure that specifically address interdisciplinary scholarship and teaching and that are not limited to academic

departments can promote the institutional change that collaboration requires (Holley, 2009).

**Motivations, barriers, and facilitators for faculty collaborative work.** The literature about faculty collaborative relationships begs three basic questions: Why do faculty members engage in collaborative work? What impedes faculty collaboration? What makes collaboration work?

Why do faculty members engage in collaborative work? Eddy (2010) put it simply: “Faculty members collaborate to get things done” (p. 63). She highlights the critical role of the champion, someone who believes strongly in the need for and in the value of collaboration to accomplish a specific goal and who puts in the time and energy necessary to bring partnerships to life. An important finding in Kezar’s (2005, 2006) research is that although administrators can do much to support, encourage, and reward collaboration, it is most desirable for collaboration to be motivated by collaborators themselves rather than by administrative mandate.

In their review of research on faculty collaboration, Austin and Baldwin (1992) identified four catalysts for faculty collaboration: (a) social and psychological forces, such as the demands of publication and need to pool resources for large-scale research; (b) professionalization and specialization of faculty and the concomitant need to take an interdisciplinary approach to address complex issues, such as the desire to combat isolation in the academy; (c) the desire to increase productivity and foster creativity; and (d) support and motivation of peers. Collaboration benefits faculty who are peers as well as future faculty members. A highly collaborative environment in an academic

department where students have opportunities to collaborate with faculty members can be especially important for socializing doctoral students into their role as future faculty members, researchers, and collaborators in the academy (Anderson, 1996).

What impedes faculty collaboration? Despite the potential benefits and positive motivations to engage in collaboration, faculty members perceive threats to initiating and sustaining collaborative relationships. Eddy (2010) cautions that faculty members must carefully consider how the collaborative causes they champion will be recognized within the reward structure for faculty members in the academy. She also notes that faculty might be subjected to role strain in their efforts to initiate and sustain partnerships. Kezar (2006) lists a number of barriers to intra-organizational collaboration in higher education, such as organizational fragmentation, problems with division of labor, faculty specialization, differences in priorities and expectations among constituencies in the organization, and lack of common values, goals, purpose, and language between faculty, staff, and administrators. The barriers to intra-organizational collaboration that Kezar (2006) identified are particularly salient for academic affairs and student affairs faculty, administrators, and staff (Bourassa & Kruger, 2001). As Ruben (2004) noted, these groups have different levels of autonomy, different types of work and work styles, and diversity within and between their professional cultures, all of which can make collaboration difficult. Nevertheless, collaboration occurs between these inter-professional groups in the academy in the form of learning communities, service learning, first-year experience programs, faculty-in-residence hall programs, academic-student affairs planning teams, and student life programs (Bourassa & Kruger, 2001). The

existence of these collaborations demonstrates that despite obstacles to collaboration, faculty, administrators, and staff find a way to make it work.

Eddy (2010) argues that loose social structures allow faculty champions of collaboration to test ideas and to build networks that might not be possible to achieve through formal, tightly linked structures. Kezar and Lester (2009), on the other hand, caution that collaborations in loosely defined structures have high failure rates and may not flourish beyond small, disconnected pockets of the organization. A focus on creating spaces and vehicles for inter-professional dialogues (Walsh & Kahn, 2010) could help to mitigate the potential pitfalls of a loosely defined faculty-librarian relationship. In Walsh and Kahn's (2010) theoretical model of collaboration in the academy, dialogue between professionals leads to professional learning, knowledge generation, and the potential to create new social structures. They argue that professionals cannot achieve these outcomes without exchanging ideas with each other. In the literature on faculty collaboration in higher education, not much attention has been given to how professionals from different educational and training backgrounds come together in dialogue and in practice around the issue of integrating information literacy into teaching and learning to create new social vehicles within an institution.

In the context of dialogues and social structures, Austin and Baldwin (1992) note that increased professionalization and specialization in the academy has created a collaboration imperative, whereby professionals need to rely on the specialized knowledge and expertise of their colleagues in order to succeed. Kezar and Lester (2009) argue that the increased professionalization and specialization of academic disciplines



and professions in higher education have also created organizational silos that isolate professionals from one another. They further argue that these structures must be broken down in order to enable collaboration. The way in which professionals are educated and socialized into their profession has an impact on the prospects of teaching collaborations.

Tierney and Rhoads (1994) identified two stages of faculty socialization. Anticipatory socialization takes place during undergraduate education and most especially during graduate school. At the graduate level, students learn their discipline, interact with faculty advisors and mentors, and prepare to take on the norms, values, attitudes, and behaviors associated with faculty life. In stage two, the organizational stage, new faculty members continue the orientation process they began in the anticipatory stage and become further acculturated into faculty life through their teaching, research, and service roles. Tierney and Rhoads also note that new faculty members are often informally or haphazardly socialized into faculty culture as they observe the behaviors, values, and norms of their senior colleagues in order “learn the ropes” (p.26). The authors argue, however, that faculty socialization should also be a strategic process through which new faculty receive explicit information and training on what it takes to succeed, especially in relation to earning promotion and tenure. This process can mitigate the challenges that new faculty have reported, such as isolation, lack of support from colleagues, and workload strain (Tierney & Rhoads, 1994).

Ruben (2004) argues that faculty socialization experiences that reinforce independence and competition can constrain efforts to engage in collaboration.

Waugaman (1994) proposes interprofessional socialization as a means of facilitating

collaboration across professional boundaries. According to Waugaman, interprofessional socialization occurs during the educational process, in which professionals develop the knowledge, skills, values, professional commitment, and behaviors of practice in the profession. Interprofessional socialization, he argues, is essential for effective teamwork between professionals because they must be socialized to work and communicate with one another. In the context of the fields of health and social care, Waugaman argues for interdisciplinary education in the classroom and in clinical practice to provide learning experiences that enable professionals to resolve issues that can interfere with quality client care. These issues include professional autonomy, norms, beliefs, values, knowledge, and expertise. The absence of a mutual appreciation for different methods of professional practice and socialization can hinder collaboration.

What makes faculty collaboration work? A few factors that facilitate collaboration in higher education have been identified in the literature. As previously discussed, Kezar (2005) identified eight organizational characteristics that must be present to enable faculty collaboration in the academy: mission, integrating structures, campus networks, rewards, administrative priorities for collaboration, external pressure, values, and learning. Those elements have been echoed by other authors (e.g., Baldwin & Austin, 1995). In addition, shared goals and vision, communication, time to allow collaborative relationships to grow, and a method for handling points of conflict or differences in opinion also help to increase the likelihood of a successful collaboration (Creamer, 2004; Mattessich & Monsey, 1992). In order for collaboration to succeed, all the conditions that

facilitate the partnership must be present; the absence of any one enabling factor can hinder the process (Montiel-Overall, 2005).

Leadership, rewards, and incentives are also key motivators in the literature on faculty collaboration. The literature is consistent on the point that collaboration is most successful when institutional leaders do not merely give lip service to it but rather genuinely support, reward, and encourage it (Baldwin & Austin, 1995). Such leadership can remove some of the fears that faculty members have about receiving credit for their collaborative work and about how they are perceived as a scholar in an academic environment that some argue prizes independent scholarship over collaboration. Ruben (2004) argues, however, that incentives and rewards in the academy reinforce individualism because it is easier to document unique contributions of individual rather than collaborative work. He also argues that institutions must do a better job of developing policies and guidelines for collaboration that make it clear to faculty collaborators how their work will be supported and/or rewarded. Kezar and Lester (2009) also recommend that the academic reward structure should be revised to accommodate collaborative work.

Organizational culture can be at odds with a collaborative spirit (Ruben, 2004). Kezar (2006) argues that higher education institutions are generally not structured to facilitate collaboration and that organizational change is needed to break down organizational departmental silos and hierarchical administrative structures that hinder collaboration. However, Kezar drew an important distinction between redesigning (or reorganizing) for collaboration and creating a culture of collaboration: Organizations that

redesign for collaboration can reward and create the conditions that enable collaboration for those who want to work together, whereas collaboration is the norm and is expected in organizations that have a culture of collaboration. Thus, the extent to which an institution supports, encourages, and rewards collaboration depends greatly upon a shared understanding of expectations for collaborative work.

**Team teaching.** Collaborative work between faculty members is important not only for the research mission of universities, but also for teaching. College and university programs across the country are working to create innovative teaching formats through collaboration to foster student enthusiasm and inquiry and to promote interdisciplinary learning. Team teaching, cross-disciplinary classes, and honors courses have been the principal elements in achieving these goals. Collaborative team teaching, or co-teaching, within higher education is frequently noted as a key practice for increasing student learning outcomes, but it receives little mention in the higher education literature (Bain, 2012). Most literature describes faculty collaboration on research projects or on shared governance. One famous article on team teaching likened the experience to a white-water rafting expedition (White, Pearson, Ratliff, Hillsman, & Miller, 2002). The metaphor seems especially apt because of the inherent dangers in any team teaching experience, especially an interdisciplinary collaboration. In the past decade, the pedagogical literature has been replete with articles describing a shift from teacher-centered to learner-centered universities (Barr & Tagg, 1995; Gardiner, 1994; Weimer, 2002). A notable study by Bain (2012) examined 63 outstanding college teachers and identified many commonalities among them. The two most important qualities were that outstanding

teachers continue to learn and that they have a high willingness to collaborate in order to improve their own teaching practices as well as the learning of their students (Bain, 2012).

As a form of collaboration, co-teaching allows instructors with different skill sets, knowledge, and perspectives to optimize both the learning experience for students and the teaching experience for themselves. Co-teaching is somewhat inconsistently defined in the literature and may often be referred to as team teaching; however, team teaching may also be used to define an arrangement whereby multiple instructors collaborate on class design but deliver instruction separately (Davis, 1995). According to Roth and Tobin (2005), *co-teaching* can be defined as an experience that involves two or more teachers who teach and learn together in an activity in which all co-teachers share the responsibility for the learning of students. While some collaborative instruction involves one person teaching one topic followed by another teaching a different topic, co-teaching can be much more complex, involving an integrated approach to planning, teaching, and assessing a classroom experience. With co-teaching, two or more teachers collectively assume primary, and often complementary, teaching roles; co-teachers take turns with jointly delivered activities, such as conducting a lecture and facilitating student activities.

Team teaching has been examined in a number of different ways in the pedagogical literature. One study examined both inter- and intrapersonal knowledge as important considerations in team teaching (Collinson, 1999). Understanding intra and interpersonal limitations can help improve the team teaching experience. Faculty members in a study of a team-taught business course were described as having a “high

level of internal motivation,” suggesting that the experience was undertaken by instructors with a strong desire to learn from each other (Hartenian, Schellenger, & Frederickson, 2001). Team teaching provides an opportunity for colleagues to model learning for students because in the best team teaching experiences, colleagues continue to learn from each other, about both content and teaching. Team teaching can provide a means of focusing more on the process of learning, instead of only on accumulating content knowledge.

As noted above, team teaching can be achieved with different approaches. Two or more faculty members can work together teaching one course, or faculty members can work together planning several classes as cluster courses. Team teachers typically develop a common syllabus, integrate their various perspectives, select topics, and share teaching activities and lectures (Davis, 1995). According to Davis, today’s academics must know “more and more about less and less” (p. 35). This specialization in a particular area can lead to the development of tunnel vision. If experts from different perspectives pool their resources in a scholarly presentation, students can be exposed to the strengths of both viewpoints. Students can develop critical-thinking skills by synthesizing multiple perspectives and relating the information to a larger conceptual framework (Davis, 1995). The general sentiment is that if it is done correctly, everyone benefits from team-taught courses.

Drawing from the education literature, Montiel-Overall (2005, 2007) describes four models for teaching collaboration in educational settings: coordination, cooperation, integrated instruction, and integrated curriculum. In the coordination model, participants

may communicate in order to improve their use of shared resources or in order to arrange schedules to allow for combined events, resulting in increased opportunities for students. The cooperation/partnership model is drawn from the management literature and represents more commitment on the part of participants. In this model, participants collaborate under an agreed upon set of similar goals. In education, this model most commonly refers to interagency or interdepartmental sharing of resources for the benefit of students. The integrated instruction and integrated curriculum models most closely describe collaboration in the classroom. In these models, participants work together to develop and teach specific courses or full curricula, facilitating an outcome not possible if individual participants worked independently. Individual participants are generally deeply involved both in the planning and co-teaching of classes and in achieving outcomes.

In practice, co-teaching may take several forms, and co-teachers may play a variety of roles at different points in a lesson or throughout a course. In one type of co-teaching arrangement, one teacher provides the lead instruction role while another teacher moves among students and provides individualized support. In another arrangement, a co-teacher enhances the instruction provided by the other; for example, one teacher might deliver a presentation in front of the class while another augments it through illustration, elaboration, or demonstration. In a third arrangement, co-teachers may comfortably alternate among a variety of roles, taking turns with activities such as conducting lectures, leading discussions, offering individual help, and facilitating student activities. Wenger and Hornyak (1999) use three teaching motifs to describe the division of content

and roles in a co-taught classroom: (1) sequential, in which teachers divide the content by topic and take turns presenting it; (2) distinctions, in which teachers address different approaches to the content, such as theory and application; and (3) dialectic, in which teachers take different sides in a debate about a topic and use collaboration to move toward synthesis. Regardless of how duties are divided among co-teachers, all participants should be engaged with students both inside and outside of the classroom.

The literature indicates a variety of benefits from collaborative teaching for both the novice and the seasoned professor. Those new to the profession can acquire team-teaching experience (Coffland, Hannemann, & Lee, 1974); the more practiced professor can acquire satisfaction from learning new teaching methods (Davis, 1995) and from hearing fresh ideas from colleagues (Robinson & Schaible, 1995). Collaborative teaching keeps instructors from slipping into a style that views the students as passive receptacles of knowledge; in so doing, co-teaching both creates and reinforces a new dynamic (Robinson & Schaible, 1995). Several authors also have reported on the isolation that many academics experience (Davis 1995; Hinton & Downing, 1998; Robinson & Schaible, 1995) and suggest that collaborative teaching is one way to alleviate the problem. It is a unique opportunity to share, critique, confront, and cooperate (Senge, 1990). Collaborative or team teaching can engage professors in more philosophical discussions than the usual discourse over class materials.

In addition, co-teaching has been used in K–12 education as a form of teacher training because it allows teachers to learn from one another through practice. For instructors in higher education, many of whom do not receive training in pedagogical



practices, co-teaching can provide a useful method of professional development through sharing experiences and insights and through generating reflective conversations that can transform teaching practice. Co-teaching provides instructors with feedback and different points of view, while also giving them the freedom to emphasize certain content areas or teaching practices that they feel are most important for students. Co-teaching empowers instructors and enables them to explore more imaginative solutions to problems; thus, it may result in increased instructor confidence, skill, motivation, professional satisfaction, personal support, and opportunities for personal growth and collaboration (Davis, 1995, Hinton & Downing, 1998; Letterman & Dugan, 2004).

In higher education, co-teaching has been used in a number of different disciplines such as health care, psychology, management, nursing, and teacher education, among others. Although co-teaching in higher education settings may take a number of different forms, it is generally believed to offer several benefits to students: It promotes multiple perspectives, allows for improved student feedback, models shared learning and collaboration skills, and increases participation in the classroom through improved dialogue and intellectual stimulation. Co-teaching can be an effective means for instructors to model professional collaborative relationships and the process of shared learning. Wilson and Martin (1998) found that students who participated in team-taught classes reported improved teacher-student relationships. Hinton and Downing (1998) received positive evaluations from students of a newly developed team-taught class. Ninety-four percent of the students expressed a preference for team teaching over the traditional teaching method. These classes fundamentally benefit students by being more

interesting and challenging. Benjamin (2000) found improved student learning outcomes from reflective and collaborative teaching. Johnson, Johnson, and Smith (2000) reported higher achievement levels, greater retention rates, and improved interpersonal skills for students in collaboratively taught classes. Students in classes using collaborative teaching techniques improve their social and communication skills and develop skills of analysis and judgment (Harris & Watson, 1997).

Finally, collaboratively taught classes can promote diversity by including team members with different ethnic, racial, and cultural backgrounds and from academically varied disciplines. By supporting diverse teaching teams, an institution indicates a commitment to the recognition and appreciation of diversity on campus, which is beneficial for both teachers and students (Hinton & Downing, 1998). Furthermore, team-taught students experience multiple perspectives from the different disciplines (Wilson & Martin, 1998). Students also benefit from learning how to incorporate information from an alternative discipline into their own field of study (Davis, 1995). Because of the emphasis on disciplinary specialization, students typically must learn important auxiliary material outside their field, either through additional training (i.e., a double major) or by becoming more interdisciplinary (i.e., through team-taught classes) in their educational pursuit. Davis (1995) suggests that students exposed to team teaching will learn to critically evaluate information, analyze and synthesize this information, and learn better ways to apply it. Students can develop critical-thinking skills by using multiple perspectives and by relating the information to a larger conceptual framework rather than to the concerns of only one discipline (Davis, 1995).

There is a great deal of support for the values of team-teaching and collaborative teaching across disciplines. In light of these benefits, it is unclear why the collaboratively taught class is the exception rather than the rule. Along with the benefits for students and teachers, co-teaching also faces a number of problems. Experienced team teachers cite a number of potential pitfalls to team teaching. It is difficult to organize and collaborate on team teaching; it takes time and imagination (Davis, 1995). It is more time consuming to be a team member than to teach alone (especially in the planning stages). Conflict can arise if the role of each team member is unclear or not agreed upon by all members. For instance, is there a team leader, or will all decisions be consensual? Moreover, if hierarchical leadership roles develop, this change increases the possibility of additional teamwork problems. Rothman (1980) suggests that it is more effective to have a single leader for group facilitation, but others (Levine, 1980) argue that co-leadership can have better results. Problems can arise, however, when an institution does not support the team-taught, cross-discipline class. Team teaching interferes with research even more than the regular teaching regime because of the additional time involved. Can the professor afford to invest his or her time in this type of collaborative work? It is important to have institutional approval and especially departmental support. The team members also should support one another; however, friendship is not a necessary component for successful team-teaching, and for some it might be an impediment (DeLois & Cohen, 2001). Therefore, co-teachers must be willing to share leadership and ideas and must have respect for each other (DeLois & Cohen, 2001). Finally, another issue for team teachers is the loss of individual autonomy (Davis, 1995). An individual

instructor cannot control matters, for instance, if one team member is slow to grade or return papers to the students. There is a loss of flexibility as well. What happens when one's lecture time is over and important material has not been covered? In a regular class, the lecture would continue at the next meeting, but if someone else is teaching the next class, the instructor cannot simply catch up during the next session.

Despite some concerns, many scholars believe that the benefits of team teaching outweigh the potential costs. Although there are useful materials to prepare faculty members for team teaching (e.g., Davis, 1995; Hinton & Downing, 1998), there are gaps in the literature. A review of the work reveals benefits and pitfalls, but the literature lacks sufficient information for instructing potential team teachers in how to build successful collaborative teaching relationships. Similarly, in regard to the use of co-teaching among librarians, a few studies describe successful co-teaching arrangements among academic librarians and teaching faculty from other departments (Schulte, 2012). Indeed, the model of the embedded librarian, which has received much attention in recent years, supports this idea of the librarian as a collaborator in a variety of co-teaching relationships, from course design to participation in online courses (Loesch, 2017; Bewick & Corral, 2010; Burke, 2012; Davis, 2007; Dodd, 2007; Havelka, 2013; Julien & Genuis, 2011; Partello, 2005). In fact, collaboration lies at the core of embedded librarianship through librarians' work with instruction, research, distance learning, and scholarly communications on many levels. In the following sections, I discuss how information literacy outcomes create an imperative for faculty and librarians to work together teaching students. I also detail the library science literature on motivations, barriers, and

facilitators to faculty-librarian collaborative work, including the prospect that embedded librarianship holds for advancing these teaching collaborations.

### **Faculty-Librarian Collaboration for Information Literacy**

Eddy (2010) identified student learning and educational reform as catalysts for collaboration in the academy. Information literacy is promoted by college and university librarians as a key student learning outcome. Regional accrediting bodies also recognize information literacy as an important student learning outcome (Lindstrom, & Shonrock, 2006; Kempcke, 2002; Mackey & Jacobson, 2005; Raspa & Ward, 2000). Librarians argue that collaboration is required in order to implement information literacy as an education reform. Motivations to integrate information literacy into student learning in higher education are grounded in the educational reform movements of the 1980s and 1990s eras of accountability that called for K–16 institutions to do a better job of producing graduates who can think critically and analytically, communicate effectively, and solve problems in society and in the workplace (Brasley, 2008). The onset of a burgeoning information age and the concomitant need for students to manage an ever-growing and evolving body of information, content, tools, and technologies have also been an impetus for information literacy.

“Information literacy” is not just a 21st century catchphrase. Zurkowski (1974) is believed to be the first to use the term during his presidency of the Information Industry Association in 1974. He called for the establishment of a national program to achieve universal information literacy for all U.S. citizens by 1984. He acknowledged that this would be a massive undertaking. In fact, efforts to integrate information literacy into

student learning at all levels of education have been ongoing over the last several decades. In 1989, the American Library Association Presidential Committee on Information Literacy identified information literacy as a key competency for citizens in the information age. The committee defines information literacy as “a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” (ALA, 1989). Information literacy programs have their roots in bibliographic or library instruction efforts which date back to the 1800s (Hernon, 1982). Traditionally, library instruction programs primarily have been focused on teaching library users to find and retrieve information by using library resources, such as the library catalog and journal article databases. Information literacy builds on the library instruction concept to include a broader set of skills and knowledge that transcends the physical boundaries of the library. It is concept-based rather than tool-based, encourages learning across the curriculum (not in discrete course assignments), and promotes the ethical use of information and an appreciation for the nature of information itself and its role in lifelong learning (Grassian, 2004; Owusu-Ansah, 2004; Shane, 2005). It has been argued that information literacy is a new liberal art (Shapiro & Hughes, 1996).

To address information literacy at the postsecondary level, the Association of College and Research Libraries (ACRL) published the *Information Literacy Competency Standards for Higher Education* (ACRL, 2000) and the *Framework for Information Literacy for Higher Education* (ACRL, 2016). These standards identify the knowledge, skills, and concepts that postsecondary students must possess to be successful in higher

education and to be lifelong learners in an information age. ACRL defines information literacy as “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (ACRL, 2016). These skills are important for undergraduate and graduate education (Blummer, 2009).

**Teaching role of librarians.** A significant body of literature has investigated the academic librarian’s teaching role from different perspectives and in different contexts (Bewick & Corral, 2010; Clyde, 2002; Kemp, 2006; Partello, 2005). Over the past two decades, interest has grown in the academic librarian’s role as a teacher, mainly because of the changes in education and the incorporation of advanced technology in higher education (Sun, Chen, Tseng, & Tsai, 2011). The librarian’s role as a teacher has included providing information literacy programs in the form of short presentations to user groups, promoting mobile information literacy, integrating information literacy into the curriculum, and promoting collaborative classroom teaching and active involvement in online distance programs (Loesch, 2017; Bewick & Corral, 2010; Burke, 2012; Davis, 2007; Dodd, 2007; Havelka, 2013; Julien & Genuis, 2011; Partello, 2005). Increasingly, academic librarians assume a range of responsibilities associated with teaching and learning and, thus, their educational role continues to develop in a way that makes them an integral part of the academic community.

Librarians have promulgated curriculum mapping as one tool for integrating information literacy at the curriculum level. In the mapping process, faculty and

librarians can work together to map out the curriculum and degree requirements within a discipline to identify spaces where information literacy can be integrated into the educational program (Brasley, 2008). Mapping can also bring cohesion to fragmented efforts to integrate information literacy across a curriculum (Brasley, 2008). Within faculty groups, the mapping process itself can inspire further collaboration (Uchiyama & Radin, 2009). Research on curriculum collaboration could inform librarians' efforts to collaborate with faculty during the curriculum development process. For example, Briggs (2007) found that faculty members in academic departments that regularly engage in collaborative curriculum review and development have positive collaboration experiences during the process. The scholarship of Uchiyama and Radin (2009) and Briggs (2007) suggests that faculty might be amenable to a sustained engagement in collaborating with librarians on integrating information literacy into the curriculum development process.

**Motivations, barriers, and facilitators for faculty-librarian collaboration.**

Within this teaching role, the importance of collaboration among faculty and librarians and the difficulties librarians face regarding effective collaboration and communication are issues that are repeatedly cited (Julien & Genuis, 2011; Lindstrom & Shonrock, 2006; Meulemans & Brown, 2001; Sun et al., 2011). The findings of a significant number of studies have revealed that among the key factors affecting librarians' efficiency in teaching are as follows: academics' disagreement and misconceptions regarding information professionals acting as partners in the learning process; the need for academics and librarians' roles to be clarified to build working relationships; and the



need for effective collaboration between the two groups (Hrycaj & Russo, 2007; Lindstrom & Shonrock, 2006; Nimon, 2002; Peacock, 2001; Skov & Skærbak, 2003).

Despite the need to collaborate to solve complex problems, differences in professional cultures and practices can be barriers to establishing and sustaining teamwork and collaboration among professionals (Montiel-Overall, 2008; Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). Drawing extensively from the literature on faculty culture in higher education, Hardesty (1995) published a seminal article on faculty culture and library instruction in which he argues that differences between librarian and faculty cultures are the primary reason that library instruction has not been more fully integrated into faculty teaching. He argues that librarians are oriented toward teaching processes and that faculty are oriented toward teaching content.

Ivey (2003) interviewed both academics and librarians and identified four behaviors necessary for ensuring effective teaching collaboration: “a shared, understood goal; mutual respect, tolerance and trust; competence for the task at hand by each of the partners; and ongoing communications” (p. 102).

Similarly, McGuinness (2006) found contradictory perceptions among academics and information professionals regarding the integration of information literacy within undergraduate curricula. The academic faculty believed that the degree to which students develop information literacy competencies depends almost completely on their personal interest, individual motivation, and ability and that the quality and nature of the instructional course offered have little impact.

Christiansen, Stombler, and Thaxton (2004) argued that there is a disconnect between faculty and librarians that impedes collaboration. They attributed this disconnect to the ill-defined relationships between librarians and faculty in which they are relatively separate groups that have limited contact with each other. The authors argue that a change in the work practices of one group does not necessarily have an impact on the other group. They framed this loose coupling in terms of organizational and status differences. At the organizational level the disconnect exists in temporal and physical divisions, organizational subcultures, power differentials, and allegiances. The authors suggest that librarians are outreach oriented and that faculty are more insular and exercise proprietary control over teaching and research. The authors also point out librarians' propensity to focus on serving the local community, in contrast to faculty members' primary allegiance to colleagues on campus, to students, and to their discipline. Status differences, they assert, are manifested in faculty perceptions of librarians as service oriented, with a primary role to organize and provide access to information, and in the perception that faculty work is primarily concerned with the production and dissemination of knowledge.

Despite librarians' advocacy for integrating information literacy into teaching and learning in the academy, the information literacy collaboration imperative is not unquestioned by librarians themselves. Eadie (1990) argues that library instruction is a waste of time and that librarians should focus on strengthening reference services and making library tools and systems easier to use, thus alleviating the need for costly, labor-intensive library instruction and information literacy programs. Kempcke (2002) and

Owusu-Ansah (2007) argue that librarians have spent too much time with limited payoff trying to convince faculty members of the importance of collaborating to integrate information literacy into student learning. They argue that instead of longing for more collaboration with faculty, librarians should take matters into their own hands and offer credit-bearing information literacy instruction through the library much like an academic department offers courses. Owusu-Ansah further argues that academic credit is the currency of the academy and that libraries should use this currency as leverage to advance their information literacy initiatives—namely, by moving the library to a more central role in the educational mission of higher education institutions. Moreover, he questions the prevailing notion that information literacy is best taught within the context of an academic discipline and asserts that it can be taught as stand-alone content.

Although not arguing completely against collaboration, Travis (2008, p. 18) asserts that “librarians should not rely on interpersonal relationships to integrate information literacy. Only written policies and assessed student-learning outcomes will enable uniform and sustainable integration into the educational process.” Travis further argued that an evidence-based approach is likely to convince faculty members who are hesitant to integrate information literacy into their courses and curricula. However, change is unlikely to happen without partnership with information literacy experts (i.e., librarians). Ruben (2004) argues that human connections, interpersonal communication, and socioemotional competencies are important collaboration skills that must be learned and embraced if higher education institutions are to truly achieve excellence.

Viewpoints on how the role, status, and professional culture and practices of librarians and faculty members influence the potential for collaboration are also recurring themes in the library and information science literature on faculty-librarian collaboration. The integration of information literacy into the higher education curriculum calls for a fundamental expansion of and shift in the perception of the librarian's role—namely, from custodian and organizer of materials to pedagogical leader and teacher in the “teaching library,” in which librarians and staff are “actively and directly involved in advancing all aspects of the mission of the academic institution” (Derakhshan & Singh, 2011; Wang, 2011). Research suggests however, that faculty members (and some librarians) may have difficulty seeing librarians in non-traditional roles, such as teachers and curriculum developers, which are generally thought of as the faculty's domain (Hoffman, 2011).

The imagery and metaphors that some librarians have used to characterize their efforts to establish collaborative relationships with faculty members are particularly telling. The literature includes comedic references that portray librarians as the “Rodney Dangerfields” of the academy, unworthy of respect from faculty, and images of librarians as misfits lost on a deserted island. Librarians also portray faculty members as needing to be lured into or pursued aggressively or surreptitiously with military, hunting, predatory, or subversive tactics to gain their interest and participation in information literacy collaboration initiatives (Badke, 2005; Chiste, Glover, & Westwood, 2000; Fonseca & Viator, 2009; Kempcke, 2002). The library and information science literature also contains anecdotal evidence of “the faculty problem,” in which faculty members are

characterized by librarians as apathetic or deliberately obstructive to librarians' efforts to bring information literacy development into the curriculum; some empirical studies also detail librarians' negative attitudes toward relationships with faculty within the information literacy context (Julien & Given, 2003; McGuinness, 2006). These perspectives, real or imagined, reflect librarians' fervent desire to engage faculty members in information literacy, but they do nothing to inspire or foster a spirit of collaboration.

Skepticism about faculty-librarian information literacy collaboration is not completely unwarranted. First, there is not unanimous agreement, even among librarians, about the meaning of information literacy, and the term means different things to different people (Bruce, 1999; Snavely & Cooper, 1997). Owusu-Ansah (2003, 2005) argues, however, that the definition of information literacy has been sufficiently debated and articulated and that most definitions are probably valid variations on the same theme. Nevertheless, Montiel-Overall (2010) found that the lack of clarity about the meaning of information literacy was a potential barrier to collaboration in a study of classroom teachers and teacher-librarians involved in a workshop to plan for better integration of the library into student learning at several schools. Research on collaboration suggests that shared purpose and shared vision are critical to the success of collaboration projects (Mattessich & Monsey, 1992). Owusu-Ansah argues that disagreements about the meaning of information literacy should be put to rest so that librarians can forge ahead with information literacy projects. He also warns, however, that faculty members and

librarians risk failure if they do not take the time to develop a mutual understanding of information literacy in their collaborative relationships.

Another reason for skepticism about faculty-librarian collaboration is that collaboration in higher education is a complex and sometimes controversial topic. Some members of the academy have a positive perception of collaboration and see value in working with others to develop and share new knowledge, to combat isolation, and to accomplish complex tasks that cannot be completed alone (Austin & Baldwin, 1992; Eddy, 2010; Walsh & Kahn, 2010). For others, collaboration can have a “dark side” and may “not be all that it is cracked up to be” (Bensimon & Neumann, 1992, p. 161).

Controversy and difficulty can arise for many reasons, such as problems with equitably evaluating and giving credit in a higher education reward system that favors solitary work, ethical considerations, status and power differences among team members, time commitments, interpersonal factors such as trust and respect, a need to redefine academic work to accommodate collaboration, and fair distribution of workload among team members (Austin & Baldwin, 1992; Baldwin & Austin, 1995; Kezar et al., 2002). Thus, collaboration can engender positive and negative feelings about its costs and benefits. Moreover, it cannot be assumed that faculty members and other professionals will engage in collaborative work solely because it could be perceived as a good thing (D’Amour, et al., 2005).

Hrycaj and Russo (2007) suggest there might be a disconnect between faculty members’ expressed interest in collaborating with librarians to teach information literacy in the classroom and their actual engagement in the practice. They argue that some

surveys of faculty attitudes toward library instruction and collaboration with librarians might be unreliable and reflect a social desirability bias whereby faculty are hesitant to express “a negative attitude toward something as ‘socially desirable’ as librarian-faculty collaboration” (p. 694). That is, for fear of being perceived as having a negative attitude toward librarians or libraries, which are generally thought of as venerable social institutions, a faculty member might express interest in collaboration with librarians but not actually engage in the practice. Hyrcaj and Russo’s argument is consistent with Ruben’s (2004) assertion that higher education institutions must reconcile the rhetoric with the realities of collaboration.

How librarians are socialized into their profession and higher education at large also impacts collaboration. The literature on the socialization of librarians is sparse and focuses primarily on issues surrounding tenure or faculty status of librarians and the experiences that prepare them to meet research, scholarship, and service obligations. This literature indicates that new librarians experience some of the same challenges that new teaching faculty experience during the socialization process, such as loneliness and isolation from colleagues (Black & Leysen, 2002). Librarians may not have a full understanding of faculty life or of the expectations for promotion and tenure (Gillum, 2010). Authors have argued that librarians are not adequately prepared in graduate school to meet the rigorous research and publication requirements that occur when they become library faculty (Jackson, 2000; Mitchell & Morton, 1992). Some notable differences between faculty and librarian socialization have been noted in the literature. Researchers argue, for example, that faculty members have a lengthy pre-professional socialization

experience in a doctoral program, in which they produce a substantial piece of research, such as a dissertation or thesis, whereas most practicing librarians usually spend no more than two years in graduate school in a library science master's program. They are also not always required to write a master's thesis. Scholars argue that two years is not enough time to encounter the socialization and training experiences that prepare one for the rigors of research and scholarship (Clark & Gaughan, 1979; Jackson, 2000). The literature also contrasts the value systems that are imparted to faculty and librarians during socialization. Researchers argue that faculty members value competition, autonomy, and independent work, whereas librarians value service, collaboration, and outreach (Gillum, 2010; Mitchell & Morton, 1992).

Faculty-librarian information literacy collaboration is still an emerging educational reform. The body of research on the topic is also still developing. Nevertheless, promising research findings indicate that although they might be uncertain about how it should be accomplished, higher education faculty see value in information literacy for their students' learning (Gaspar & Wetzel, 2009; Gullikson, 2006; Montiel-Overall, 2007; Montiel-Overall, 2008; Weetman, 2005). Collaboration between librarians and teachers can be a powerful influence on student learning and achievement.

**Embedded librarians.** Because of these positive student outcomes, the concept of the embedded librarian, which actively promotes collaboration among librarians, faculty, and instructors, has been growing (Cold & Urton, 2013; Muir & Heller-Ross, 2010). Dewey (2005) coined the phrase "embedded librarian," and since then a number of definitions have emerged. Shumaker and Talley (2009) define an embedded librarian



as a librarian focused “on the needs of one or more specific groups, building relationships with these groups, developing a deep understanding of their work, and providing information and teaching services that are highly customized and targeted to their greatest needs.” While the development and offering of online courses, such as Massive Open Online Courses (MOOCs), has been identified as the main reason for the emergence of embedded librarians (Barnes, 2013; Davis & Smith, 2009; Edwards, Kumar, & Ochoa, 2010; Farkas, 2008; Hawes, 2011; Hoffman, 2011; Hoffman & Ramin, 2010; Konieczny, 2010; Shepley, 2009; Sinclair, 2009), another important reason is the integration of information literacy into course curricula (Bowler & Street, 2008; Edwards & Black, 2012; Hall, 2008; Pritchard, 2010; Tumbleson & Burke, 2010a).

A significant proportion of the literature has reported on librarians’ own experiences as embedded librarians in academic courses (Covone & Lamm, 2010; Matava et al., 2010; Muir & Heller-Ross, 2010; Olivares, 2010; Rudasill, 2010; Shepley, 2009; Tumbleson & Burke, 2010b). Several studies have evaluated embedded librarians’ programs in terms of improving students’ competencies. Bowler and Street (2008) and Dugan (2008) found that the students’ performance improved when a librarian was embedded in the course compared to a condition in which no such librarian was present.. Edwards and Black (2012) and Edwards et al. (2010) evaluated a program of embedded librarians in an online graduate educational technology course and found that students perceived librarians as helpful with their online assignments. Li (2012) found that students improved their information literacy competences through a financial and information literacy course. Tumbleson and Burke (2010a) also reported on a large-scale

project evaluating an embedded librarian program in courses using Blackboard. It was found that instructors were satisfied with the outcomes of using embedded librarians and that students were able to identify relevant resources and develop their research skills.

Apart from specific efforts in certain institutions, Shumaker and Makins (2012) reported on a project that aimed to explore the effectiveness of embedded librarian programs in higher education. In particular, this project focused on four areas of investigation: nature of librarians' contribution; communication and promotion; evaluation; and management engagement. They found that librarians offered mainly information literacy instruction and that they depended on word-of-mouth and traditional channels of communication to promote their role. However, evaluation of these programs proved challenging as a range of different methods had to be implemented and as cooperation between the library and users had to be established. On the whole, it seemed that librarians' proactive presence in courses had a positive impact on students' learning experiences and research skills irrespective of the context and methods used.

The development and offering of embedded librarian programs have positively affected students, instructors, faculty, and librarians. Students were able to use more information resources to complete their assignments (Hall, 2008); had immediate access to library assistance, advice, suggestions, and resources (Becker, 2010; Jacobs, 2010; Tumbleson & Burke, 2010a; Wright & Williams, 2011); and could engage with librarians (Hall, 2008; Jacobs, 2010). Furthermore, librarians developed an important role in supporting academics in the transition to offering online courses (Barnes, 2013). Librarians used diverse tools to reach different types of learners as well as different forms

of communication to do so (Herring, Burkhardt, & Wolfe, 2009; Li, 2012; Wright et al., 2011). Librarians also developed strategies to establish personal relationships with students (Bezetz, 2013) as well as with faculty (Pritchard, 2010; Tumbleson & Burke, 2010b; Wright et al., 2011).

In general, embedded programs have enabled librarians to offer more instructional courses (Jacobs, 2010), to enhance the integration of information literacy in academic curriculum (Herring et al., 2009; Tumbleson and Burke, 2010a), to increase research consultation hours (Jacobs, 2010), to provide more guidance to students (Tumbleson & Burke, 2010a), and to notify students regarding technological developments and new resources (Tumbleson & Burke, 2010b). While these efforts have enabled librarians to gain and establish credibility among students and faculty (Hall, 2008) and to promote librarians' role in teaching (Schulte, 2012; Brower, 2011), embedded programs in which librarians take on a full co-teaching role with faculty remain limited.

## **Summary**

In higher education institutions, faculty accountability and institutional accountability have increased, thus creating an emphasis on faculty and librarian collaboration. According to Latham, Gross, and Witte (2013), faculty and institutional accountability is an important issue since the focus has been on student learning outcomes and student performance. Latham, Gross, and Witte further suggest that developing collaborative partnerships between faculty and librarians not only improves learning outcomes for students but also addresses educational and regional mandates.

The research on faculty-librarian collaboration in the context of information literacy is complex. The complexity is manifested in how each group defines information literacy and collaboration and in their perceptions of the importance of collaborating in order to integrate information literacy into student learning. In the broad literature on collaboration, shared interests and goals have been identified as cornerstones of collaborative relationships. However, the literature on faculty-librarian information literacy collaboration suggests that faculty members and librarians do not necessarily have the same goals for student learning; similar goals, though, would be conducive to engaging in information literacy collaboration. Kvenild and Caulkin's (2011) research suggests that the faculty-librarian team teaching partnerships to which many librarians aspire (i.e., curriculum integration) is actually less common in practice and is difficult to achieve. Moreover, research reveals that some faculty members are not aware of librarians' professional guidelines for working with teachers and faculty to integrate information literacy into student learning. Knapp (1998) notes that "collaboration among professionals from different specializations calls for a broad vision of professional roles, and understanding of multiple professional 'languages,' a clear conception of collaboration itself, and a set of appropriate skills" (p. 11).

Collaboration between faculty and librarians appears to be an obvious way to address student learning outcomes at the institutional level and to resolve the frustrations both groups of professionals feel with students' inability to incorporate information literacy into research projects and to exercise basic library skills (Harmony, Kumar, Refaei, & Skutar, 2010). The concept of embedded librarianship has redefined the role of

the academic librarian as that of a true teaching partner with faculty in the design and delivery of courses, but there is great need to better understand how faculty and librarians successfully navigate the murky waters of a co-teaching relationships in order to create sustainable, long-term teaching collaborations (Schulte, 2012).

### **Chapter 3: Methods**

This study used a qualitative research methodology. Denzin and Lincoln (2011) define qualitative research as a situated activity that locates the observer in the world. Qualitative research involves interpreting phenomena in a natural setting in order to make sense of them. Qualitative research “stresses the socially constructed nature of reality, the intimate relationship between the researcher and what is studied and the situational constraints that shape inquiry” (p. 8). The qualitative method can “describe routine or problematic moments and meanings in individuals’ lives” (pp. 3–4). It uses many interconnecting empirical practices to gain a better understanding of a situation to find answers.

Qualitative researchers use a combination of interviews, observations, and text analyses (Denzin & Lincoln, 2011). Many different research approaches use these methods to gain a better understanding of situations and experiences. To me, qualitative research is the study of people based around a particular context in order to understand them and their situation at a more intimate level. My reason for using a qualitative method—and in particular, portraiture—is that it is consistent with Patton’s (1980) conclusion that it is difficult to capture the rich, descriptive stories of people, especially their relationships, through a quantitative study.

A qualitative design was appropriate for this study because I aimed (a) to explore and describe the qualities and characteristics of successful faculty-librarian

teaching collaborations, (b) to understand how dialogue has an impact on faculty-librarian collaborations, and (c) to understand how social vehicles have an impact on faculty-librarian collaborations. In addition, I sought to generate new themes and insights that have not been previously identified in the literature. These research goals are consistent with a qualitative design, which allows themes to emerge inductively and deductively from the data (Creswell & Poth, 2017).

In the following sections, I discuss why I chose portraiture methodology and the key elements of the method. I also discuss the research design components, including the setting and population, data collection and analysis, informed consent and confidentiality, the role of the researcher, and study limitations.

### **Why Portraiture?**

Portraiture was the appropriate method for this study for several important reasons. First, portraiture differs from other methodologies in that it focuses on what is good and working within a particular research setting. Portraiture resists pathologizing its subject and in turn seeks to reveal a subject's "goodness" (Lawrence-Lightfoot & Davis, 1997). Ultimately, the job of the portraitist is to document the ways in which people work to overcome obstacles, improve their practices, and build on their strengths. As the researcher, I was committed to identifying goodness within faculty-librarian collaborations in order to break free from the tradition of documenting failure. However, in no way was this study an attempt to dismiss the difficulties of collaboration, and special care was taken to examine the full dimensionality of team teaching, allowing the narrative to reveal any layers of vulnerability or weakness. Central to this expression of

goodness were the ways in which faculty and librarians balanced their strengths and vulnerabilities during the team teaching process.

A second reason why portraiture was fitting for this study was that it focuses on documenting “human behavior and experience in context” (Lawrence-Lightfoot & Davis, 1997, p. 11). Similar to other qualitative research methodologies, portraiture documents people’s voices and examines their meaning-making processes, but the portraitist widens the lens to investigate not only people’s words and thoughts but also their actions and experiences in particular settings. Unlike positivists who see context as corruptive, portraitists insist that “the only way to interpret people’s actions, perspectives, and talk is to see them in context” (Lawrence-Lightfoot & Davis, 1997, p. 11). Put simply, context is seen as the means to understanding; therefore, the narrative is always rooted within a geographical, cultural, social, economic, and political setting. This setting provides valuable information regarding the ways in which the participants understand their experiences. Context is also central to Walsh and Kahn’s (2010) model of faculty collaborative work, which serves as the framework for this study.

Attention to context was central to my study, as previous research has already determined many of the motivations, barriers, and facilitators of faculty collaborations. Likewise, research has shown that dialogue and social vehicles have the greatest impact on collaborations in higher education. Therefore, it was crucial to pay attention to the context in which faculty and librarians employ their practices. As with practices, beliefs and values do not exist in a vacuum but are shaped by the context of both the discipline they study and the institution in which they work. In particular, this study investigated



librarians who were already embedded within a unique context, one that was, in most cases, vastly different from their previous work with faculty. Capturing the ways in which faculty and librarians taught in this new context was critical to understanding the nature of their teaching relationship.

The collaborative approach of portraiture was also valuable to this study in that it allowed the participants to shape how their voice was constructed and analyzed. Unlike other methodologies, portraiture embraces researcher subjectivity by engaging both the researcher and participant in a collaborative process (Lawrence-Lightfoot & Davis, 1997). Through this collaborative process, a narrative was created that represented the insider's perspective and captured "an experience-near" (Geertz, 1974). To ensure that the process remained collaborative, I was diligent in continually member checking my data with each participant and pair. I began each interview by asking the participants to confirm or contradict any emerging themes or patterns I identified. Additionally, I asked the participants to read my final portraits and to provide feedback as to whether the portraits were authentic and credible narratives that effectively portrayed their experiences.

Using portraiture, the researcher and participant bring their own histories, perspectives, and interpretations to the research process, and together they shape the evolving portrait. The researcher's background, values, and interests are not liabilities to be controlled for; instead, the researcher uses "the knowledge and wisdom drawn from life experiences as resources for understanding, and as sources of connection and identification with the actors in the setting" (Lawrence-Lightfoot & Davis, 1997, p. 95).

At each stage of the research process, my decisions, observations, and analyses were informed by my background and perspective. I chose to study faculty-librarian teaching collaborations because I have had the experience of being part of a similar relationship. Previously working as an embedded librarian, I had experienced many opportunities, challenges, fears, and triumphs in a team-teaching relationship. Therefore, I conducted my study not only as a researcher trained to see the outside perspective but also as a librarian and teacher familiar with the dynamics of a successful teaching relationship. At different times, I drew on my various identities of teacher, librarian, and researcher to help build relationships with my participants and to better understand their stories. Portraiture allowed me the freedom to draw on both the personal and the empirical as I collected, analyzed, and wrote up my findings.

### **Portraiture as a Method**

According to Lawrence-Lightfoot and Davis (1997), in their seminal book, *The Art and Science of Portraiture*, portraiture is a method of inquiry and documentation that blurs the lines of aesthetics and empiricism (p. 3). Lawrence-Lightfoot (1983) used portraiture to document the culture of schools in *The Good High School*, to describe the life stories of individuals, including her mother, and to explain relationships among families, communities, and schools. The second author of *The Art and Science of Portraiture*, Davis, with a group of researchers, used portraiture to study the culture of community art centers.

In explaining portraiture as a research method, Lawrence-Lightfoot and Davis (1997) state:

Portraiture is a method framed by the traditions and values of the phenomenological paradigm, sharing many of the techniques, standards and goals of ethnography. But it pushes against the constraints of those traditions and practices in its explicit effort to combine empirical and aesthetic description, in its focus on the convergence of narrative and analysis, in its goal of speaking to broader audiences beyond the academy, in its standard of authenticity rather than reliability and validity, and in its explicit recognition of the use of the self as the primary research instrument for documenting and interpreting the perspectives and experiences of the people and the cultures being studied. (p. 13)

Portraiture, an artistic process, is a suitable methodology for capturing the essence of the human experience, such as teaching collaborations, as portraitists record and interpret the perspectives of the people they are studying. Portraiture allows researchers to organize a narrative around central themes from the data and write layered stories wherein study participants are the subjects, not the objects, of the research. Lawrence-Lightfoot and Davis (1997) define five essential features of portraiture: context, voice, relationship, emergent themes, and the aesthetic whole. The essential elements of portraiture mirror the elements of successful collaborative work and therefore provide insight into the nature of faculty-librarian relationships.

**Context.** Portraitists view human experience as framed and shaped by setting. The context of a portrait is the setting—that is, where data collection happens. The context takes into account the physical, geographic, temporal, historical, cultural, and aesthetic nature of the research site, the participants, and their experience. The context becomes the reference point to place people and action in time and space and as a resource for understanding what they do and say.

The internal context is the physical setting. In portraiture methodology, personal context, or the place and the stance of the researcher, are made clear. A historical context considers the origins and evolutions of each participant.

**Voice.** In portraiture research, the researcher's voice is evident throughout the research—as witness, as interpretation, as preoccupation, as autobiography, as discerning others or listening for the voices of other identities or feelings, and as voice in dialogue through interviewing and having informal conversations with participants. The researcher may use voice as witness to express the outsider's stance, to look across patterns of action and see the whole picture or portrait. In this way, the researcher acquires knowledge about their participants but as a witness to the experience being captured and from a position on the boundary.

Voice as interpretation underscores the role of the portraitist, for this is where she makes sense of the data. In making an interpretation, the portraitist must be vigilant about providing enough descriptive evidence in the text so that the reader might be able to offer a different interpretation of the data. Thick description contributes to authenticity by providing enough information so that readers can determine how closely their situations match and can be generalized to the research situation. Using multiple data sources, repeated observations, and interviews provides the qualitative researcher with rich data for making the interpretative voice evident.

Voice not only seeks to witness the participant's stance through new eyes but is also used as preoccupation, or the ways in which the researcher sees and records reality. This concept of voice could also be viewed as the personal context or the researcher's

perspective of the story, as it reflects the researcher's disciplinary background, theoretical perspectives, intellectual interests, and understanding of relevant literature. Voice as autobiography also reflects the life story of the portraitist. In this sense, the researcher's perspectives, questions, and insights are inevitably shaped by her own developmental and autobiographical experiences. The researcher uses these experiences as resources for understanding and as sources of connection and identification to participants.

Listening for others' voices refers to how the portraitist seeks out and tries to capture the varying identities or feelings that may be revealed while observing or interviewing participants. When the portraitist listens for voice, she observes closely, watching for the ways in which an actor's movements and gestures speak more loudly than words. For example, in the margins of an observation protocol, the researcher could make notes of participants' gestures and expressions. Voice in dialogue chronicles the developing relationship between the researcher and participant. It refers to the presence of the portraitist's voice discerning the sound and meaning of the actors' voices and sometimes entering into dialogue with them. Most qualitative research methods include voice in dialogue through interview and informal conversations with participants.

**Relationship.** Portraits are created, formed, and sketched through the development of relationships. Portraitists must forge a relationship during the first site visit and maintain that relationship throughout the research process, and maybe even beyond the study period. The relationship between the researcher and participant serves as the researcher's road in the search for goodness. That is, portraitists search for what is happening, what is working, and why it is working rather than focusing on the

identification of weaknesses. Relationship also considers the ethic of care the researcher takes in conducting her or his research and in being empathic to participants' experiences. Relationship acknowledges the indebtedness toward the participants in the giving of their time, space, and personal experience. Finally, relationship considers the research boundaries that must be set by the researcher and the participant.

**Emergent themes.** The development of emergent themes reflects the portraitist's first efforts to bring interpretive insight, analytic scrutiny, and aesthetic order to the collection of data. The themes give the data shape and form. They are consistently born from the data. In most qualitative research, emergent themes are constructed by first listening for repetitive refrains that are spoken frequently and persistently. The researcher then listens for resonant metaphors and poetic and symbolic expressions that reveal the ways participants experience and illuminate their realities. The qualitative researcher may also listen for the themes expressed through cultural and institutional rituals that seem to be important to organizational continuity. Later, she uses triangulation to weave together the threads of data converging from a variety of sources. Finally, the researcher constructs themes and reveals patterns shown by the participants that are contrasting and dissonant.

**The aesthetic whole portraits.** The product, or the aesthetic whole of portraiture, has four dimensions: 1) conception, the development of the overarching story; 2) structure, the sequencing and layering of emergent themes that scaffold the story; 3) form, the movement of the narrative of the story; and 4) cohesion, the unity and integrity of the story. Portraitists begin their investigations with a perspective, a framework, and a

guiding set of questions that are a result of their previous experience, their reviews of the literature, and their conceptual and disciplinary knowledge. The aesthetic whole is the actual portrait that evokes context, voice, relationship, and emergent themes of the research. As a picture or painting, the aesthetic whole is that which is placed inside of the frame.

For this study, portraiture was also used as a methodology because of its focus on the positive aspects of relationships.

**Goodness.** Portraiture seeks to illuminate complex dimensions of goodness as a phenomenon rather than identify and document social problems. Indeed, portraiture is an intentionally generous and eclectic process that begins by searching for what is good and healthy and assumes the expression of goodness will always be laced with imperfections. The researcher who asks first “what is good here?” is likely to absorb a very different reality than the one who is on a mission to discover the sources of failure. Portraiture research seems especially suitable, then, for asking what is going on in a librarian-faculty teaching partnership, when much of the research up to this point has focused on barriers to co-teaching relationships.

## **Participants**

The final contextual element that Lawrence-Lightfoot and Davis (1997) address as necessary in framing the portrait and shaping the context is purposefully selecting a participant or site. They caution, “As the researcher documents the context—rich with detailed description, anticipatory themes and metaphors, and allusions to history and evolution—she must remember that the context is not static and that the actors are not

only shaped by the context, but that they also give it shape” (p. 57). Perceptive of the environment and the participants, the researcher must be aware of small and large transformations.

The design of this dissertation study called for the recruitment of a purposive, criterion-based sample (Patton, 2014) of librarians who met three criteria: (a) they were currently working as a librarian in a public or private accredited higher education institution in the United States; (b) they would be collaborating with a faculty member for at least one full academic quarter or semester between 2018 and 2019 or 2019 and 2020 to integrate information literacy into a course, academic program, or discipline at an accredited higher education institution in the United States; and (c) the nature of their partnership with the faculty member required intensive co-teaching of multiple sessions during the quarter or semester. Because of the nature of portraiture, the study participants had to be in a current teaching partnership so that classroom observations could be made.

It should be noted that some librarians are on the tenure track or have tenure/faculty status at their institution and, therefore, might consider themselves to be a college/university faculty member by profession. However, despite their tenure status, librarians function primarily in the capacity of practicing librarianship, and for purposes of this study, they were considered members of a different profession than college/university faculty.

To recruit faculty members, I approached librarians first because of their historical position as the primary champions and leaders of information literacy initiatives in higher education. Each librarian who met the criteria for participation and



who agreed to participate in the study was asked to provide the name of a faculty member with whom she or he was currently collaborating. I then contacted the faculty member to explain the study and to invite him or her to participate. I aimed to recruit four librarian-faculty pairs for the purposes of this study. Since the nature of the study was focused on the collaboration between the librarian and faculty member, the subject matter and level of the course in which they were teaching was not considered to be relevant. Nevertheless, I did attempt to recruit a diverse group of pairs based on gender, race, age, and level of experience.

Based on the results of the selection procedures, four pairs were identified as effective co-teaching dyads for this study. Each pair included a librarian and a faculty member. Two of the pairs shared the same gender; overall there were six women and two men included in the study. All of the pairs worked at private universities; two of the universities were in the Midwest and the third university (site for two pairs) was in the Rocky Mountain West. Three of the classes were first-year undergraduate classes, and the final class was a cross-listed undergraduate/graduate research methods class. Each participant chose a pseudonym to protect her or his identity, and the characteristics of the universities or classes were generalized only when necessary to protect the confidentiality of participants. Detailed information on each of the pairs is included in the portrait chapters.

- Pair 1: Margaret (female, faculty member, English) and Martina (female, librarian)

- First-year writing class at a private Catholic university in the Midwest
- Pair 2: Donald (male, faculty member, Writing) and Dorothy (female, archivist)
  - First-year writing class at a private research university in the Rocky Mountain West
- Pair 3: Jane (female, faculty member, English) and Alice (female, librarian)
  - Cross-listed undergraduate/graduate English research methods class at a private research university in the Rocky Mountain West
- Pair 4: Julia (female, faculty member, History) and Eric (male, librarian)
  - First-year experience class at a private religious college in the Midwest

### **Data Collection**

Data collection included three types of data: 1) 4–8 total hours of observations of co-teaching sessions delivered by the librarian and faculty member, recorded with field notes for each of the four pairs; 2) two individual interviews with both the librarian and faculty member for each pair; and 3) joint interviews with each librarian-faculty teaching pair. Data was collected in two phases: Interviews and observations of the first two pairs were done between January and June, 2019, and between August and November, 2019, for the second two pairs, as shown in Table 1.

<b>Date</b>	<b>Data Collection Timeline</b>
February 22, 2019	Observation of Margaret teaching (1 hour); Interview 1 with Martina (in person)
February 25, 2019	Observation of Martina teaching (1 hour); Interview 1 with Margaret (in person)
February 27, 2019	Interview 1 with Dorothy (in person)
March 18, 2019	Observation of Martina teaching (1 hour)
March 20, 2019	Observation of Margaret teaching (1 hour)
April 25, 2019	Observation of Donald and Dorothy teaching (4 hours)
April 30, 2019	Observation of Donald and Dorothy teaching (4 hours)
May 1, 2019	Interview 1 with Donald (in person)
May 2, 2019	Interview 2 with Martina (Zoom)
May 24, 2019	Interview 2 with Margaret (Zoom)
June 7, 2019	Interview 2 with Dorothy (in person); Interview 2 with Donald (in person)
June 12, 2019	Joint interview with Donald and Dorothy (in person)
June 14, 2019	Joint Interview with Margaret and Martina (Zoom)
September 4, 2019	Interview 1 with Jane (in person)
September 6, 2019	Interview 1 with Alice (in person)
September 11, 2019	Observation of Jane and Alice teaching (2 hours)
September 25, 2019	Observation of Jane and Alice teaching (2 hours)
October 7, 2019	Observation of Jane and Alice teaching (2 hours)
October 21, 2019	Interview 2 with Jane (in person)
October 22, 2019	Interview 2 with Alice
October 25, 2019	Observation of Julia and Eric teaching (1 hour); Interview 1 with Eric (in person)

October 28, 2019	Observation of Julia and Eric teaching (1 hour); Interview 1 with Julia (in person)
November 8, 2019	Observation of Julia and Eric teaching (1 hour); Interview 2 with Eric (in person)
November 11, 2019	Observation of Julia and Eric teaching (1 hour); Interview 2 with Julia (in person)
November 21, 2019	Joint Interview with Jane and Alice (in person)
November 25, 2019	Joint Interview with Julia and Eric (Zoom)

**Table 1: Data Collection Timeline**

**Interviews and observations.** Qualitative research methods are often used when researchers seek to establish common patterns or themes between particular types of respondents (Gubrium & Holstein, 2001). The individual interview is one of the most common methods used in qualitative research (Creswell & Poth, 2017). Seidman (1998) writes that “at the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of that experience” (p. 3). I loosely followed Seidman’s (1998) three phases to guide my interview approach. The interviews were semi-structured around the conceptual framework outlined in chapters 1 and 2. As Gubrium and Holstein (2001) recommend, the interview guide used in my interviews was advisory, more of a conversational agenda than a procedural directive. All interviews were recorded and transcribed with the participants’ consent. Most interviews took place in person, but Zoom was also utilized when physical travel was not possible because of scheduling conflicts. Each interview began with a briefing to seek oral permission and a review of the objectives and purpose of the research study. Moustakas (1994) suggests that interviews should begin with social conversation aimed at creating a

trusting and relaxed atmosphere. With this aim, I strove to keep the interviews informal and interactive so that a safe, comfortable space could be created in order to build trust.

Using the principles of portraiture, I first conducted individual interviews with both the librarian and faculty member of each pair. The first one-hour interviews focused on their motivations (engagement) for being part of a co-teaching relationship and the characteristics of how their relationship functioned (Appendix A). After these initial interviews, I conducted two to three observations of co-teaching sessions between each pair. These observations were conducted to look for evidence of dialogue and practice and to further build context. Following the observations, I conducted final semi-structured, one-hour interviews with each librarian and faculty member (Appendix B). These follow-up interviews gave me the opportunity to probe further into the practices and beliefs revealed during the first interview and the observations as well as to ask about how they viewed social structures in relation to their partnership. Lastly, I conducted a group interview with each pair to gather additional data on how they communicate with each other and their perceptions of their partnership (Appendix C).

Central to the success of this study was my ability to build relationships with each pair, as relationship building is fundamental in portraiture. Specifically, the relationship between the researcher and participants allowed for access, connections, and knowledge construction (Lawrence-Lightfoot & Davis, 1997). During the data collection process, I also recognized that in order to build a relationship of trust, I needed to speak about my personal background and perspectives on information literacy and team teaching.

## **Data Analysis**

All interviews were transcribed verbatim, and all field notes from observations were typed up as scenes to be used throughout the portraits. Participants selected pseudonyms to maintain confidentiality. On the basis of transcribed field notes, individual interviews, and joint interviews, emergent dimensions or themes were developed using five means of analysis that are consistent with portraiture methods (Lawrence-Lightfoot & Davis, 1997). First, I identified the visible and audible refrains spoken and enacted by the co-teachers in various contexts. Second, I searched for resonant metaphors voiced by participants. Third, I noted rituals and ceremonies, which indicated what the participants valued. Fourth, I triangulated data, allowing me to look for points of convergence among various strategies and tools of data collection. As a final analysis strategy, I listened for perspectives and voices that seemed to fall outside and diverge from the emergent dimensions.

Only through the interpretive reflection of the portraitist are themes named. By hearing the stories, witnessing the action, and reflecting on their meaning and relationship to one another does the researcher begin to see patterns. Although it may seem like a tidy process, discovering themes and patterns in portraiture research is not as neat as it may seem. A dissonant voice often may present itself after the neat list or web of patterns is conjured. Only by reflecting on the data—reading aloud various passages and contemplating portraiture design—do the final themes emerge.

The purpose of the interviews, in particular, was to gather information that aided in answering the research questions, and a large amount of information was obtained to

be analyzed. One task, a necessary part of the data analysis process, is data reduction. This process is, according to Miles and Huberman (1994), “not something separate from analysis. It is part of analysis. The researcher’s decisions – which data chunks to code and which to pull out, which patterns best summarize a number of chunks, which evolving story to tell – are all analytic choices” (p. 11). I used the memo-writing strategy within the portraiture method to facilitate this process. Miles and Huberman (1994) stress the importance of coding throughout the text instead of creating a separate coding file and recommend that coding be done after each session. In order to achieve this, I highlighted and used color codes directly on the transcripts. After each session, the interview was transcribed and coded for emerging themes by using NVivo. I transcribed my own data so that I became more intimate with the data and developed more familiarity with the participants’ voices, an integral component of the portraiture method (Lawrence-Lightfoot & Davis, 1997). I read through the data multiple times, looking for commonalities and contradictions. Constant review of the data collected helped to determine the questions to be asked in later interviews.

Responses were transcribed verbatim. Rubin and Rubin (2005) emphasize that transcriptions consist of the language (e.g., slang, profanity, improper English) used by the interviewees. In addition, responses that were “indications of mood” (Rubin & Rubin, 2005, p. 204), such as sighs, frowns, and smiles, were also transcribed. I used member checking, a strategy in the authenticity criteria, whereby the participants checked the authenticity of my work by reviewing the actual transcriptions of what I recorded during the interviews. I sought to draw parallels to my own and other participants’ experiences

and to prior sessions. After transcribing and reviewing each piece of evidence collected, I also wrote a memo and a reflection. Each memo and reflection were coded and sorted according to general themes that emerged during the data collection process.

The interview data was triangulated with data collected through teaching observations (documented in a field journal) and through additional analytical memos. General themes emerged from the data for each pair, and these themes were used for the chosen metaphor and overall portrait. Cross-case analysis of the themes led to broader interpretations of the data, including the implications of my study and suggestions for future research. During my data analysis phase, I was sure to include anecdotal stories from my interviewees to identify shared experiences, interactions, and perceptions among my participants. This approach aligns with the portraiture method's emphasis on voice and on interactions with the data and between the researcher and the participants.

### **Informed Consent and Confidentiality**

While ethical considerations are important in all research, they are especially important in constructivist research because “they are the essence of what research is all about and can only enhance it” (Erlandson, Harris, Skipper, & Allen, 1993, p. 155). Constructivist researchers must avoid harming and deceiving participants, but they also must actively protect their participants through informed consent and through privacy and confidentiality in terms of what is shared and personal space. Although there was no expectation that any part of the study would produce harm, I repeatedly checked with the participants to confirm that they were not experiencing harm. At any time, participants could withdraw if they believed it was in their best interest. Finally, although complete



anonymity could not be provided because of the thick and rich description and the potential of participant and reader familiarity with the participants and contexts, I did my best to ensure confidentiality and privacy by using pseudonyms and appropriately disguising participants and institutions' identities. To manage the risk that participants might feel some discomfort recalling any negative aspects of their collaborative experiences, the informed consent also advised participants that they did not have to discuss any aspects of their collaborative experiences that they did not wish to discuss or that would cause them any discomfort for any reason. Because of this advice, participants may not have shared all experiences in their interview that were relevant to this study. Nevertheless, minimizing risk to the participants was a higher priority than maximizing data collection. Data collection for the study only began after receiving IRB approval from the University of Denver on September 19, 2018.

### **Criteria for Research Quality**

Cronbach and Suppes (1969) established the need for standards in establishing research quality; this need exists because as Merriam (1998) states, “all research is concerned with producing valid and reliable knowledge in an ethical manner” (p. 198). In other words, when conducting research, I established protocols to ensure the reliability and validity of my research. Such protocols ensured that my research was solid, worthwhile, and contributed to filling the knowledge gap that exists in the literature—namely, giving voice to librarian-faculty co-teaching experiences. However, research quality protocols have historically been rooted in the positivist paradigm; these standards are known as the Evaluation Research Society (ERS) Standards (Guba

& Lincoln, 1989) and include six sections: “formulation and negotiation, structure and design, data collection and preparation, data analysis and interpretation, communication and disclosure, and utilization” (Guba & Lincoln, 1989, pp. 230-231). These standards spoke to the research design, interaction between researcher and participants, and data analysis aspects from a positivist paradigm.

However, these standards are not well-suited for postmodern, qualitative research methodologies for many reasons (Guba & Lincoln, 1989). First, the assumption of interaction between the researcher and participants being limited to the “formulation and negotiation” and “communication and disclosure” phases is not suitable for qualitative methods. Instead, such methods require constant contact between the researcher and participants because their interactions are cyclical, involving constant “feedback and feedforward” (Guba & Lincoln, 1989, p. 231); they are not linear as the ERS Standards suggest. Further, subjective, qualitative inquiries make different knowledge claims than those of the more objective quantitative explorations (Creswell & Poth, 2017):

Qualitative knowledge claims are generally based on meaning-making applied to some phenomenon, while quantitative knowledge claims are more focused on establishing evidentiary, data-driven relationships among variables (Creswell & Poth, 2017). The ERS Standards assume objectivity to be inherent in the methods that are more conventionally empirical; qualitative methods do not satisfy these standards. Consequently, Guba and Lincoln (1989) describe parallel authenticity criteria to achieve research quality in constructivist research.

I used Guba and Lincoln's (1989) five authenticity criteria to ensure the research quality of my study because the portraiture method emphasizes an intimate interactivity with the data and interviewees; "relying solely on criteria that speak to methods leaves an inquiry vulnerable to questions regarding whether stakeholder rights were in fact honored" (Guba & Lincoln, 1989, p. 245). The authenticity criteria not only address methodological concerns but also questions about participants' interactions and reflections. The dimensions of the authenticity criteria are fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity (Guba & Lincoln, 1989).

The first criterion of authenticity is *fairness*. Guba and Lincoln (1989) address the necessity of fairness by stating that inquiry (and evaluation) are value-bound and value-situated and that evaluators inevitably confront a situation of value pluralism. As a result, multiple constructions resting on different value systems emerge from stakeholders in and around the evaluation effort. The role of the evaluator is to seek out and communicate all such constructions and to explicate the ways in which such constructions—and their underlying value systems—are in conflict (p. 246).

It was also critical to share the data collected and analysis with my participants to ensure that I interpreted the data accurately. I recognized that my inquiries were grounded in my own values and made these beliefs known to address my own biases. Additionally, people have their own constructions and conceptions of reality; all must be honored, addressed, and reviewed to ensure authenticity.

The second criterion in authenticity is *ontological authenticity*, which “refers to the extent to which individual respondents’ own emic constructions are improved, matured, expanded, and elaborated, in that they now possess more information and have become more sophisticated in its use” (Guba & Lincoln, 1989, p. 248).

Ontological authenticity was achieved by conducting member-checking, wherein participants reviewed the construction of their experiences and discussed how their understandings have changed as a result. This checking primarily occurred during the second and third interviews.

*Educative authenticity* expands on ontological authenticity in that participants enlarge their own understanding but also better grasp and appreciate the constructions made by others (Guba & Lincoln, 1989). Similar to achieving ontological authenticity, educative authenticity was attained by through member checking (Creswell & Poth, 2017), thus affording the participants the opportunity to review the transcripts of previous interviews and check for accuracy.

*Catalytic authenticity* is the fourth criterion, an understanding of the case or issue that facilitates action or decision-making (Guba & Lincoln, 1989). In order to provide catalytic authenticity, the implications and findings of my research were shared with the interviewees. At the completion of each portrait, actual quotes used were also compiled and shared with the participants. The co-teaching portrait was also shared.

Finally, *tactical authenticity* builds on catalytic authenticity in that action is actually carried out. I achieved this type of authenticity by sharing my findings with the

librarians and faculty who participated in the hopes of providing suggestions for programmatic changes that may improve future experiences.

### **The Researcher's Role**

Creswell and Poth (2017) note the importance of considering the researcher's biases, values, and personal interests in the qualitative research process. As a librarian with responsibilities for information literacy instruction in a higher education institution, the issue of faculty-librarian collaboration is important to me as a matter of professional practice and scholarly inquiry. I disclosed my role as a librarian and doctoral student to the participants in the interview and in the email announcement I sent to recruit participants for the study. Although I know much about information literacy and about working with faculty members in my role as a librarian, it was important that I remained open to discovering new insights throughout the data collection and analysis process and that I did not make assumptions or judgments about the perspectives that the research participants expressed.

### **Summary**

The purpose of the following chapters is to provide portraits of the four pairs of faculty-librarian co-teaching teams concerning working together and how they put these conceptualizations into practice. The co-teachers' understandings were collected through interview data, and enactments of these understandings were constructed with the researcher through observations and follow-up interviews. These chapters present an extensive discussion of the qualities and characteristics of each faculty-librarian teaching collaboration in the form of portraits, with a particular emphasis on the roles of dialogue

and social structures. Rich, thick description of each dyad's beliefs and practices of co-teaching are provided within this discussion. Each collaborative relationship is represented as a different metaphor for the portrait, symbolizing how understandings were enacted in various ways. Because qualitative research yields much information containing complex meaningful structures, metaphors can be used to explicate clearly structured patterns within the results of data analysis (Schmitt, 2005). I chose to utilize such metaphors as a powerful way to communicate the variations in the partnerships of each dyad. Essentially, these metaphors are designed to help the reader visualize the different ways in which co-teaching was conceptualized and enacted for each pair.

#### **Chapter 4: Margaret and Martina—The Symphony**

When I began my study, Margaret and Martina were co-teaching together for the second time. They were co-teaching a first-year writing class, ENGL 102: COMP II: Writing as a Way of Knowing, to 20 students in the spring semester of 2019 at a small Catholic university in the Midwest. The structure of the curriculum is truly unique: The librarians run a credit-bearing information literacy class that is embedded into an English composition course that is required for all first-year students. The library curriculum includes a series of three class meetings and five assignments that are taught and graded by the librarians. These assignments, though, are integrated in a sequenced way into the curriculum for the composition course. The overall curriculum is developed in a collaboration with the library and the English department, but there is a clearly-defined syllabus and structure. The coordinator of library instruction (Martina in this case) assigns the pairings of librarians and instructors. Teaching these required modules is part of the instructional work of the librarians, and most librarians teach an average of three different sections of the course. The English composition instructors are considered the primary instructors for the course since they teach the bulk of the course content and since it is part of their faculty course load.

ENGL 102 is part of the core curriculum at the university, and it teaches college-level skills in critical reading and writing. Introductory information literacy skills are embedded into the course, and students learn the basics of library research. The

university defines information literacy skills as including the ability to locate both print and electronic sources by searching library databases for articles and books, effectively using the internet for academic purposes, evaluating information critically, and using information ethically and legally.

Martina had worked for the university since early 2017 and was the instructional services librarian charged with developing the library's educational programming. In addition to a master's degree in library and information science, she has a second MA in English and a graduate certificate in women's and gender studies. Throughout our interviews, she noted a particular interest in the politics of information and information literacy—namely, how different communities value, interact with, and create information. She was also passionate about feminist pedagogy as it relates to the teaching of research and writing. In addition to her work as a librarian, Martina had also taught English composition as an adjunct instructor. Margaret was an assistant professor in English, and at the time of the study, was in her fourth year of teaching at the college. Margaret holds an MFA in creative writing and a PhD in English. While this was Margaret's second time co-teaching with Martina, this partnership was her first overall co-teaching experience. Martina had co-taught with other composition professors in the past during her time at the university. Both Margaret and Martina had experienced difficult teaching partnerships in the past with this course and were enthusiastic about being able to teach with each other a second year in a row.

While this portrait focuses on the relationship between Margaret and Martina, it is helpful to also understand the relationship between the campus and community. The



university is located on a 30-acre wooded campus in a suburb just outside of a major Midwestern city. The homes in the area are large (many in a Frank Lloyd Wright style), and the suburb has the air of an affluent community with close proximity to the city and plenty of parks. In addition to the university, there are many schools in the area, and as I was driving in to campus for my first visit, I noted the presence of temporary street closures to allow the children to walk to school without having to wait for traffic at a crosswalk. While these closures made it difficult to get to campus, I imagine that such a structured neighborhood would be very welcoming for families with young children.

When I arrived at the university for the first time on a gray February day, I also immediately noticed that the campus had a similar feel to the surrounding community. It is a small, gated campus with lots of open space and stately architecture. It has the look of an expensive, private liberal arts college. Moreover, it is a Hispanic-serving institution (HSI) and has an enrollment of undergraduate full-time equivalent students that is more 25% Hispanic (in stark contrast to the demographics of the surrounding community).

### **The Metaphor of the Symphony**

The relationship Margaret and Martina shared can be captured by the metaphor of a symphony: While one individual takes the lead at different times, the other continues to play an engaging and important part in the cooperative relationship. Planning the course together allowed the co-teachers to create a well-constructed, synchronized, and interesting “musical” experience for their students. A symphony involves soloists and accompanists and times when all instruments play. When a soloist can rely on and trust the other members of the symphony, their communication becomes more natural and the

musical results are much better. Although Margaret took the lead role more often than Martina, the accompanist (Martina) could utilize her skills freely, which inspired the soloist (Margaret) and created a cohesive musical piece. The symphony metaphor includes the following elements: All members must be fully aware of each other's teaching quality and style; when filling and improvising around the soloist, an accompanist must use good judgment and her own unique abilities; and the accompanist must possess knowledge of the full composition before the performance.

Margaret and Martina shared many commonalities: They both have short, brown hair styled in a bob; are at a similar stage of their careers and in life; both have young children at home; both grew up in the local area; and both share a passion for creative writing and the live literary arts scene. In my experiences interviewing them, they also had similar conversational styles: direct and honest and full of compassion for students. While they were always polite and welcoming, they both also seemed very rushed, like they had too much to do and not enough time in the day to do it. As I learned during my interviews, they often expressed frustration at having too much to do, and they wished for more time to improve the class for their students. They both expressed a strong commitment to personalized education—they wanted to truly get to know their students as human beings and form relationships with them, something that I witnessed first-hand during their teaching sessions.

In the classroom is where their differences in personality were more noticeable. While they both embraced active learning (not wanting to lecture too much), Martina had a more structured pedagogical approach, giving the students step-by-step instructions and

carefully watching the time to make sure she followed her class outline. Margaret was more laid back and informal, often starting class by asking students how they were doing, chatting about their sports, and asking them about their other classes. They both appreciated each other's personality differences, though, because of their shared common grounding in their approach to teaching.

### **The Co-Teaching Relationship as a Symphony**

Both Margaret and Martina had endured negative experiences with previous co-teaching relationships because the structure of the composition curriculum at the university did not always allow co-teachers to choose their partner or to modify the assignment structures. From this experience, Margaret and Martina felt strongly that co-teachers must share certain beliefs and interests to be a successful team; these beliefs were important for laying the groundwork for their collaborative partnership. While their personalities were very different, they both noted how their shared interests and teaching beliefs helped form a strong holistic partnership to benefit the students. In describing how their shared interests helped them form a connection upon their first meeting, Margaret noted,

It helps that we both have a storytelling, creative writing background. I think that really helps. So that was something we were able to sort of find out right away about each other. We both are pretty visible in the [local] storytelling scene. So I feel like, yeah, that just gave us something to bond about right away. (Margaret, 2.25.19)

Martina also explained how shared interests and life experiences helped shape their initial relationship:

So we were randomly thrown together and we quickly realized that we just kind of had a lot in common. As far as the formal stuff, like teaching philosophy, we didn't explicitly talk about it, but it just worked well. We realized we lived in the same part of the city, had kids the same age and that we're both involved in the local live lit scene, which is pretty big here. I was also really interested in her course theme, which is gentrification and at the time was developing a new assignment to talk about research as conversation. (Martina, 2.22.19)

Margaret and Martina not only had shared interests, which contributed positively to their relationship, but they both also had similar beliefs about the purpose and approach to teaching. In describing their shared views of teaching, Margaret emphasized that they were both “interested in the same things as teachers, but we also share values about safe and inclusive spaces and about the importance of critical thinking for college students” (Margaret, 5.24.19). Mutual respect of each other's skills and knowledge was an important facet of the Margaret and Martina's collaborative relationship. Each teacher valued the background knowledge that the other brought, and they were eager to learn from each other when they started their work together. Margaret explained how their complementary and individual skills aligned well when working with students:

I think it really helps to have instructors who share values, but have different instructional styles. What could be better for students, right? They're hearing from two different people that these things [writing and research skills] are

important, right? It's helpful to know that Martina and I are both telling them in different ways that these skills are really important. Hearing the same thing from two different people in two different ways. It's really helpful for student learning and being exposed to two different teaching styles because then we're accommodating diverse learners. You know, Martina and I are really different, but I'm glad for it. Now, if we didn't share values, that could be an issue, but we do share values. Our styles are different, but our values are the same, and nothing could be better for students. (Margaret, 5.24.19)

In summing up her relationship with Martina, Margaret said, "She actually cares about the things I care about which is important and helpful. And yet we're totally different, which also really, really helps the course and better equips our students with research and writing skills" (Margaret, 2.25.19).

During the interviews and observations, Margaret and Martina both conveyed that while librarians and faculty must be willing to collaborate and work with each other around the unique needs of students in the class for co-teaching to be successful, they also believed in the importance of having clearly defined roles and responsibilities within a curricular structure (like parts of a symphony). For example, the nature of the curriculum at the university meant that Martina, as the librarian, had the freedom to create her own assignments and grade students. In describing this unique curricular structure, Martina noted the positive and almost Utopian aspects of the curriculum for librarians: "In some ways we have this [structure] that many librarians that I know would

dream about . . . we have a required course embedded in another required course!”  
(Martina, 5.2.19).

For Margaret, the unique curricular structure offered an opportunity to have additional teaching techniques and assignments that enhanced the writing curriculum. Describing an assignment that Martina had developed, she said,

“I love [her] exercise! She knew they were reading articles about gentrification [for my class] and she found this article that she thought would be good for my theme. She gave them this article and then designed an activity to get them to pick out important names and key terms and all kinds of information. And I just felt like it was a really wonderful reading exercise that I had never encountered before. It was really active learning! I will totally borrow that from her [for other classes] because I feel like it’s something we’re not doing enough for writing classes, teaching reading skills. (Margaret, 5.24.19)

The curricular structure, while offering many benefits for the students and freedom for each instructor to design and grade assignments, also created unique and interesting challenges for their co-teaching relationship. Margaret and Martina usually taught separately (though Margaret was often present during Martina’s teaching times), so they needed to make sure they were on the same page about course expectations and about how they were explaining concepts so as not to confuse students. Margaret was particularly concerned initially with inconsistencies in grading, and she described her fears about grading when she first started co-teaching with Martina:

I felt nervous about it because I felt like, well, I [also] evaluate this course and I know the students really well. This is a relationship-centered university and I take that really seriously. I [was] really glad to have been hired here for that reason. I know my students very well. So, the thing that initially bothered me was someone else grading them without knowing them. Like this person comes [into the classroom] three times and I teach it three times a week. Why should that person be able to grade too? But she's grading things that are her specialties, and I'm grading on the things that are mine. It doesn't bother me at all anymore. That was short lived. The nerves were short lived. You know, I think it's been good for me because I can remind them of things she's taught them, and I'm happy to learn new skills from her too. (Margaret, 2.25.19)

Both Margaret and Martina went back and forth in my interviews on whether they felt the curricular structure was beneficial or challenging. Martina noted that she often wished for more leeway to change things, but also appreciated the approved elements of the curriculum, which required faculty to incorporate information literacy into the curriculum. In describing this tension, she noted,

A few of them [the English faculty] push back on some of the formalized elements, and the governance around the [curricular] elements is a little muddy currently. But it's nice that we [the librarians] have a formal role in a required class. At the same time, the overly prescriptive nature of the assignments is something I, as the instruction coordinator, want to improve. (Martina, 2.22.19)

Margaret also noted some ambivalence about the curricular structure and wished that she and Martina had more time to really change the assignments.

I mean the structure is a little weird, and in a magical world I would like to redo that structure and maybe the librarians would come in [to the classroom] a little more often, but I understand why that can't happen at [our institution], because I think they're [the librarians] overworked. Everyone is overworked and underpaid!

(Margaret, 2.25.19)

### **Pedagogy as a Symphony**

Margaret and Martina both defined their co-teaching relationship as two professionals with specific and distinct strengths working together in ways that benefit students in a research and writing classroom. They believed co-teaching was an effective method for helping college students enhance their writing and research skills as well as for building lifelong skills related to critical thinking and information literacy. While substantial growth may not occur in one semester, these co-teachers believed some strides could be made and that student improvement would increase over time if they effectively worked together. They had a unique co-teaching relationship in that while they were both teaching the course, they rarely taught a class session together. As the primary instructor for the course, Margaret was usually present during Martina's sessions, but she was mostly available to answer student questions about assignments and did not generally interject when Martina was teaching. Despite the fact that they rarely physically taught together, their teaching practices were surprisingly complementary, as if they were playing from the same score.



In the four class sessions that I observed of both Margaret and Martina teaching, they employed active learning techniques (with very little lecturing) and displayed a caring and attentive attitude toward the students. Since the focus of this study is on the relationship between Margaret and Martina, I used my observations to gain a better understanding of how they communicated in the classroom to make comparisons of their overall teaching styles and approaches. What follows are detailed narratives of two class sessions for both Margaret and Martina that exemplify their “pedagogical symphony.”

**Session one with Margaret.** Margaret’s class took place in a writing classroom connected to the library building. It was a green, carpeted room with white walls in the shape of a semicircle with four “pods” of tables distributed evenly around the room. There was an instructor station with a computer at the tip of the circle (across the room from the door) with a screen in between two windows. A crucifix and a clock hung over the door. On this day, Margaret was wearing a green turtleneck sweater and jeans. She was holding brown books and was drinking coffee out of a travel mug as she introduced students to the purpose of the day’s class. The assignment the students had been given was to run a pro/con debate about an editorial in a local newspaper. In order to help the students prepare for the debate, Margaret gave each student a “3-part Debate Organizer” handout to complete. The handout explained the organization of the debate: opening statements from Team A and Team B, rebuttals from Team A and Team B, and then closing statements from Teams A and B. Team A had to argue that the editorial made useful and important claims while Team B had the opposing side, arguing that the editorial made dangerous and irresponsible claims. Before letting the students prepare for

the debate, Margaret provided an overview of the editorial, summarizing the main points and reminding them that the article was very controversial at the time it was written. The editorial analyzed the response to Hurricane Katrina in order to claim that a similar disaster needed to happen in their local city before changes would be made regarding gangs and drugs.

The debate teams had been randomly assigned in a previous class session, and Margaret asked them to get back into those groups. She then asked them to summarize the research they had done previously to get ready for this debate. “What keywords did you use to find information?” she asked and wrote the answers on the whiteboard as they spoke. She then had the students discuss the information in their groups in order to prepare their opening and closing statements for the debate. Most students broke up their teams into smaller groups focusing on the different parts of the debate organizer. Margaret walked around the room while the students were working, prompted them to take notes, and encouraged their brainstorming—”What do you think the other side will argue? How will you anticipate and defend?”

Margaret prepared the students for the debate by reminding them of the rules of civil discourse: “Don’t attack the person, but focus on the argument they are making.” She gave some verbal clues for how to phrase their questions and rebuttals in considerate ways: “I’m not clear on what you mean” or “Can you give me an example to illustrate your point?” Before they began, Margaret asked if there were any questions and several students noted that they were frustrated by the “side” they had been given in the debate. She conceded that it could be hard to defend something that you do not like or

understand, but she suggested that that “struggle is part of the process of becoming good critical thinkers.” The debate began, and the students progressed through all the stages, with Margaret pausing the debate at various points to ask them to summarize the argument or rebuttal of the opposite team and asking clarifying questions if a point was not clear. With five minutes left in the class, she asked the students what they learned that would help them with their final papers. As the students talked about the importance of getting the complete story and all the facts, she praised their comments: “I love what you are saying about getting the whole landscape of an argument!” Students began to pack up their things while Margaret reminded them that Martina would be helping them evaluate the sources that they were finding for their papers in a future class.

**Session two with Martina.** In both of Martina’s sessions that I observed, students were in a computer lab space in the library, with long rows of desktop computers all facing forward. There were computers on each side of the room, with a large space down the middle and windows with blinds in the back of the room. The space between the rows of computers on both sides was rather narrow, with many student backpacks and other items piled on the ground, so it was difficult for students or the instructor to get to the computers closest to the wall. The instructor computer was at the front with a projection screen and a whiteboard to the side.

During my first observation with Martina in late February, she was wearing a camel jacket over a gray dress with gray tights and brown boots. Once all the students had arrived, she asked them to log in to the computers and then jokingly asked, “Do you still remember my name?” A few students giggled, and Martina then asked (in a more

serious tone) if the students had seen her comments and grades for their last assignment. Since only a few students raised their hand, she indicated that they would need to show her how they had incorporated her feedback into their future assignments. She noted the class agenda she had written on the board: 1) Review comments, 2) Peer feedback on research questions, 3) Background information, 4) Credo, 5) Assignment information, 6) Extra credit. Martina began by passing out a worksheet on their research topics with the following questions:

1. What is your research topic?
2. What do you already know about your topic?
3. What questions about your topic would you like to answer? (Put a checkmark next to the one you find most interesting)

The students spent the next 20 minutes completing the worksheet with their answers while Martina walked around putting out name placards for each student. When they were finished writing, she asked the students to pass their worksheets to the front of the room. She then placed the worksheets on different tables around the room and asked the students to get up and walk around and write any questions or feedback that they had for their classmates on as many research questions as they could comment on. By this time, Margaret had also arrived to observe the session, and she participated, along with Martina, in reviewing questions and writing comments. The students very quietly, with some whispering, walked around the room to view the worksheets and write comments. It was not a large space, so students often bumped into each other awkwardly while trying to make sure they got to all the papers. Once they were done, Martina asked, “Why did

we do this assignment?” The students expressed how it was nice to see each other’s questions and share ideas. They also enjoyed seeing how their topics were connected. As the students gave examples of their research topics, Martina paraphrased their questions, attempting to help them narrow and define their research topics.

Following the conversations about their topics Martina demonstrated how to search Credo, an online reference source. She explained the difference between a basic encyclopedia and the subject-specific resources that they would find in Credo. She also noted how different disciplines might bring a different perspective to a topic (sociological perspective vs. psychological perspective). She asked the students to try to find an entry on their broad topic, not one narrowly defined to the local area. “I want you to trust me that looking at these sources will be helpful even though your topics are focused on [local city]” she stated. She asked students to find two to three articles on their topic because for an upcoming assignment they would need to evaluate one article from Credo and one article from Wikipedia in order to identify key words and common themes for future research. As the class was near its close, Martina went back to the instructor computer to pull up the assignment information in Canvas (a learning management platform) to show them the rubric and the due date. As Martina showed the assignment information, Margaret walked around quietly interacting with students asking them if they had found some useful sources. When class ended, Martina reminded students of her office hours and said that she would also stay after class if anyone had questions.

**Session three with Martina.** On a March day, I conducted my last observation of Martina’s classes. Martina was dressed in business casual wear with a black dress and an

off-white cardigan. Margaret was also present at the session, wearing a gray turtleneck sweater, jeans, and a plaid scarf, but she sat in the back quietly during most of the session after handing back graded quizzes to the students. Martina began the class by reminding the students that this was the last full class period that she was teaching and encouraged the students to make use of her office hours: “Don’t be a stranger!” The purpose of the class Martina noted was to learn about scholarly articles and to complete a journal activity. After briefly discussing the different categories of information and talking about the next assignments that were due, she handed every student a copy of a print journal from a variety of disciplines and a print handout to complete. Students could use the internet to find information about their journal to complete the handout. Students were allowed to work with a partner or alone. Martina floated around checking in on students while they were working, but overall the room was fairly quiet, with only the sound of shuffling papers and typing.

The assignment asked students to choose one article from the journal and answer the following prompts about the article and the journal itself:

- Title of the Journal
- Author Information:
  - Who are the authors?
  - Where do they work?
  - What is their area of expertise?
- Evidence and attribution
  - What different types of sources do the authors use as evidence?

- How are they citing their sources throughout the paper?
- Journal Submission Information
  - How are articles submitted? Look for author guidelines.
  - What about the description of this process is unique to scholarly journals?
- Advertising
  - Are there ads in the journal? What types of things are being advertised? Who are they targeting?
- Publisher/ownership
  - Who owns the journal? How might ownership affect the content?
- Audience
  - Who is the source meant for? What factors indicate the audience?
- Cost
  - What is the cost of this journal? Does it vary at all?
- Accessibility
- How many ways can you come up with for people to find and read this journal? List them here.

After 15 to 20 minutes, Martina brought the students back together and asked them to share what they had found regarding the author information. She wrote their answers on the board while asking students to note common information between the answers. Students noticed that there was not much variety in the jobs of the authors; most were professors at universities. Martina took the opportunity to explain that research is

part of professors' jobs. Moving on to discuss evidence and attribution, she had students detail the types of information that they had found and told students to turn to the back page of their article to look at the citations. "Can you tell a book citation from a journal article citation?" she asked. Most students just shrugged, so she moved on to talking further about the types of evidence indicating that they needed to find evidence on their own topics for their upcoming paper.

The conversation about the worksheet ended with a discussion of the journal submission process since that was as far as most students were able to get with the worksheet in the allotted time. After having students review the author submission process for their journal, she asked them to state their understanding of the peer-review process before the class watched a video on peer-review. The class ended with a short demonstration on how to use a library database to find scholarly, peer-reviewed articles so students could search on their own. With 10 minutes left in class, Martina showed the students where to find their assignment information in Canvas and gave some pointers on what she was looking for in their answers—"Don't just answer the questions. Talk about why the criteria matter for the source you have selected. Write substantial, meaningful paragraphs about how your sources talk to each other." Since this was the last session for Martina's part of the course, students also needed to complete her course evaluations in the remaining minutes. She emphasized that the evaluations were anonymous: "I do read them, and I want the class to be useful for you." She then left so that students could complete the evaluations, and Margaret came forward from the back to collect the print journals to give back to Martina later. Margaret stayed while the students finished the



course evaluations and then concluded class by stating, “Thanks for your attention, and I’ll see you on Wednesday.”

**Session four with Margaret.** On a day late in March, I began my second and final observation of Margaret teaching. She was wearing a black and white polka dot dress with a black cardigan and red high-heeled shoes and had a tumbler of coffee with her as she introduced the students to the agenda for the class. For class, students were conducting a “Topic and Source Fair”; students would be divided up into two groups: shoppers and presenters. Presenters would sit around the room and give a short elevator speech on the topic of their final paper. Shoppers would visit with at least four different presenters and ask questions about their topic. After the shoppers heard from at least four of their colleagues, everyone would switch roles. Before the fair began, Margaret gave students an overview of the goals of the activity: “Students in the past have found this activity very helpful. Please take it seriously. Please help each other, but also have fun.” The presenters set up shop in various places around the room, and then the shoppers went to find a presenter to work with. Margaret kept time and told shoppers when to move to their next presenter. As the students were working, several of their classmates entered class late. Margaret quietly met with the late students to get them set up with the activity. As the shoppers continued to find their next presenter, she also made sure that no students were alone or left out of the activity. “Let’s not leave anyone alone,” she said, “Help each other find someone to be matched up with.”

As the shoppers then took their turn as presenters, Margaret continued to move around the room listening in and offering advice as needed. “Try to ask challenging

questions. You are just wasting time if you sit there in awkward silence,” she noted. If the students in a group did not have any questions, Margaret filled in by making suggestions: “Can you tell us about the sources you used for your topic so far?” Overall, Margaret was very encouraging, but also pushed the students to think more critically about their topics: “That’s a good point, but I would caution you to consider that it’s not the only point for your argument.” Before ending class, Margaret asked students how they liked the activity. She also encouraged them to keep plugging away at their research: “Martina and I will help you. She’s checking your sources and I’m making sure you are reading those sources closely.” Class ended with a reminder that students should sign up for a time to meet for a one-on-one conference with her to discuss their projects.

### **Summary**

There is nothing quite as impressive and majestic as experiencing a fine symphony orchestra performing a grand classical score. The exquisite precision, timing, and intonation all coming together in a collective wave of music can be awe-inspiring. Making music is an often-used metaphor in education. Teamwork, coordination, discipline, role definition, flexibility, goal setting, and execution are required components for a successful symphony orchestra and are equally sought-after elements for co-teaching. The concert master (first violin) takes responsibility for the orchestra playing with a singular voice, but each of the section leaders takes ownership over their respective areas and contributions to the whole. By combining areas of expertise and sharing responsibility, Margaret and Martina, even though they often played separately,

combined their repertoires of skills to create the best musical experience they could to help students grow and learn.

## **Chapter 5: Donald and Dorothy—The Dance**

Donald and Dorothy co-taught together for their fifth time during my study. They co-taught two sections of a first-year writing class, WRIT 1133: Research and Writing, during the spring quarter of 2019 (March–June 2019) at a private research university in the Rocky Mountain region. Dorothy is an associate professor and curator of special collections and archives at the institution. She has a master's degree in library and information science and has been at the university in her current position since 2012. Her research focuses on critical information literacy and pedagogy, creating inclusive, diverse, and equitable collections and community-driven archives. She also teaches archival courses in library and information science as an adjunct faculty member.

Donald is a teaching assistant professor in the writing program at the university where he had been teaching since 2014 as a full-time faculty member, and he has also taught writing at the same institution as an adjunct for several years prior to accepting his full-time position. He has an MFA in writing and a PhD in rhetoric and theory. As a scholar, he is interested in the ways rhetorical theory illuminates and challenges the practices of scholarly rhetorics and other academic discourses. At the university, the librarians teach a number of embedded workshops for writing program courses, particularly WRIT 1133, but it should be noted that Donald and Dorothy's partnership extends far beyond the usual pairing as they have freely chosen to expand their relationship to create a comprehensive co-teaching model. Donald is the instructor

of record, and Dorothy is embedded as the archivist as an extension of her teaching role with the libraries.

WRIT 1133 is a required course in the first-year writing sequence and is part of the core curriculum. The course builds on the writing and rhetorical skills learned in WRIT 1122 by shifting attention from general rhetorical strategies to specific rhetorical strategies that shape different kinds of academic inquiry. Through introduction to quantitative, qualitative, and textual research traditions, students identify how written reasoning varies in terms of the questions posed, the kind of evidence used to answer them, and the nature of the audience or forum for the result. In addition, the course teaches students how to shape research into substantive academic arguments, with attention to the ethical consequences of their rhetorical choices. Students complete at least 20 pages of revised and polished writing in projects requiring library-based research (in multiple assignments and numerous additional exercises). Many of the writing classes have a specific theme, and Donald's classes have a strong focus on text-based and interpretive research through the use of archival primary sources.

The university where Donald and Dorothy work sits within the city limits of a major city in the Rocky Mountain West, and while it is an urban campus, with a student population around 10,000, it has the feel of a small liberal arts school. It has a regal setting, with a rich landscape of fully matured trees, towering brick buildings, red cobble stone pathways, and copper-plated domes. The surrounding residential community has a suburban feel with a mix of large, newly built homes and more modest post-World War II brick, ranch-style houses.

## **The Metaphor of the Dance**

The relationship Donald and Dorothy shared can be captured by the metaphor of the dance: The elements making two individuals effective dance partners are present in their collaborative relationship. There exists rhythm, fluidity, and improvisation between the two teachers when they share the classroom (Adams & Cessna, 1993). Donald and Dorothy had developed a sense of harmony and rapport over time that allowed them to move and progress well together. Ultimately, one teacher usually started a session while the other followed, yet the roles would often change as the lesson unfolded and as the need arose. When engaged in the dance, the supporting partner was able to sense the other's thoughts and direction, so that they could emphasize and strengthen the topic; thus, the lead teacher was able to release control to his colleague. Subtle dynamic shadings, tensions and releases, rhythmic patterns, and counterpoints are the stuff of which dance phrases, motifs, themes, and variations are constructed.

Donald and Dorothy come from different backgrounds, but they share similar interests and have a common approach to life as well as to teaching. Dorothy, who has long, brown, curly hair and frequently wears tunic-style dresses with leggings, is passionate about social justice, and her tone becomes very serious when she discusses using archival materials to tell the stories of underrepresented populations. With short brown hair and a beard, Donald also first comes across as a serious man, but you soon realize that he uses sarcasm to bring levity to otherwise lofty discussions about the role of rhetoric in writing and research. He is also married to an archivist (not Dorothy) and his sense of respect for Dorothy's work creates a positive dynamic in their relationship. They

both have the same quirky, serious, yet fun personality. They both loved to discuss theory and big picture approaches to teaching with primary sources, but their day-to-day teaching style was rather loose, informal, and improvisational. In the classroom, they were both easy-going, funny, sometimes a little snarky, sometimes a little forgetful, but also fun, passionate, and caring toward their students. They both took their work really seriously, but they employed a playful banter when communicating in the classroom and a casual back-and-forth teaching “dance” that was fun to watch.

### **The Co-Teaching Relationship as a Dance**

Donald and Dorothy started out their interview conversations with me by explaining how they met and their motivations for working together. While the librarians at the university are often involved in teaching workshops for writing classes, it was uncommon for archivists to be involved with instruction, but Dorothy was also looking for more opportunities to teach. In describing how they first met, Dorothy indicated how Donald really wanted to work with an archivist but needed to do so under the constraints of the quarter system:

Donald approached me, I think, partly because he is married to an archivist, and so he has an understanding of what our gripes are. But also he clearly likes archivists. He had already been working with his wife [who works for a local historical museum], but it’s difficult to get off campus and work with other institutions, even if you have a personal relationship with somebody out there, such as your wife. (Dorothy, 2.27.19)

Donald reiterated that the initial motivation for their co-teaching partnership was that he wanted to create more engaging classes but needed a more convenient way to make that happen.

I'd been having my class do sort of fieldwork stuff, going out and observing public spaces, and it was really positive. But I said, well, I want more of an apparatus to this class than just, you know, we go to a local cultural organization on a field trip. So, I actually reached out to our own special collections and archives. I was interested in having my students do something a little more hands on than the usual sort of Google searches. It just sort of developed from that, and now we've worked together for all of these years since. (Donald, 5.1.19)

They both also strongly believed that research and writing could not be taught without a connection to libraries. Donald stressed that it was the personal connection to librarians that was most important: "In my opinion, research and writing classes need to be connected to libraries in some way. I don't think you can do a writing and research class without some connection to libraries. And more importantly, some connection to librarians" (Donald, 6.7.19). Dorothy found that archival research offered unique opportunities to teach students "critical thinking and evidence-based research skills" (Dorothy, 2.27.19). Beyond the connection of research and writing, Donald also felt that co-teaching allowed him "an opportunity to share with my students different voices, different perspectives . . . rich cross-sections of different disciplinary discourses" (Donald, 6.7.19).



They both also viewed their relationship as an effective way to meet the requirements of faculty positions (teaching, service, research). Donald noted that partnering with Dorothy had been “an opportunity to pursue excellence” in all areas (Donald, 5.1.19). Dorothy also praised the opportunities brought about by their relationship: “Having an incentive to do research and presentations around this work encourages me to maybe go into more depth than I might otherwise because then I have something more substantive to write about” (Dorothy, 2.27.19).

My discussions with them around the motivations for their co-teaching pursuits made me realize that they both put a significant amount of work into their relationship and the class, but they also worried that they put too much time into the effort. Dorothy was particularly concerned with managing her time and did not believe she would be capable of embedding into another class:

It is so time intensive to develop, not only to develop the relationship with a faculty member, but to develop a kind of scaffolded, multi-session instruction plan. If we were to try and do this with even one other writing faculty member, I would very quickly be out of what is scalable. It’s essentially not scalable . . . it is what it is. (Dorothy, 2.27.19)

When discussing all the interactive assignments that he had created with Dorothy, Donald explained that he had become more cognizant over the years of the potential negative impact his course might have on Dorothy and her colleagues.

There’s a level of familiarity and comfort now of working together and I need to be careful about the time and resources that they have available. I mean, I’m

sending them, you know, 45 to 60 students every quarter, which can be a lot.

Which is great for their numbers, but, you know, maybe not great for their workflow and peace of mind. (Donald, 2.27.19)

While they shared passion for archives and primary sources, Donald and Dorothy did have different understandings about their approach to teaching. Dorothy explained how she preferred to spell things out for students while Donald wanted students to learn how to figure things out on their own. In talking about these differences, she said:

In my teaching style, I want to be more, what I would call didactic, whereas Donald definitely wants to structure courses around things that emerge more naturally from dialogue and discussion. If you're dealing with these very hard to understand concepts of rhetoric, I tend to want to be more explicit. This is what we're doing right now and this is why. I think he wants to have the knowledge build and emerge more naturally. (Dorothy, 2.27.19)

Over the years, Dorothy has learned to adjust to Donald's teaching style, and she talked at length about how he would encourage her in the classroom by telling her she was doing a good job of "being really spoiler free," meaning that she was effectively refraining from telling the students too much context about certain archival documents (Dorothy, 2.27.19). For his part, Donald believed that they did share a similar approach to teaching and that he really thrived on the dynamic, generative aspects of their teaching relationship. He very enthusiastically told me about all the creative assignments they had designed and how they had developed well-thought out, structured plans. However, he

also acknowledged that “no battle plan survives first contact with the students” and in day-to-day teaching, they just “fly by the seat of [their] pants” (Donald, 6.7.19).

Donald and Dorothy demonstrated a unique balance between having a solid theoretical underpinning for their assignments and creating well-defined plans that were then often changed when they found something they liked better. Dorothy described the informal nature of their methods for planning classes:

There’s a lot of informal conversation and chatting and him coming down to look at things and kind of poking around to see what he might want to do differently or change. So I would say that it is less what I would consider to be formal course planning, but it’s sort of him noodling around in the archives and seeing what he sees and how he might want to make changes with me. (Dorothy, 2.27.19)

Donald alluded to the informal nature of their collaboration as well but indicated that it often had to do with the nature of discovery in the classroom: “It’s not that the plans get torpedoed or anything like that, but that the plans create a situation where students take it somewhere completely unexpected, sometimes to wonderful effect” (Donald, 6.7.19).

This informal approach to their relationship could also be seen in their teaching style, which involved a lot humor and sometimes sarcastic banter with each other and also with their students. Dorothy described how she used humor to “make the archives feel as accessible as possible and make it feel less like a space that is serious and restrictive” (Dorothy, 6.12.19). Donald explained that he used humor to also help students understand that archival research could be chaotic and messy and also to “underscore that some of the stuff going on here is kind of absurd” (Donald, 6.12.19).

He was quite frank in expressing that sarcasm was part of his personality, the kind of humor that he liked, and that it did not feel genuine to “be formal and serious all the time” (Donald, 6.12.19.). Dorothy shared a similar sense of humor, and during my final joint interview with them, they traded a number of friendly jabs, just as they did during their teaching sessions.

When asked what they valued the most about their co-teaching relationship, Donald noted how the “collaboration has been incredibly generative and transformative for me in ways that I don’t think I would have anticipated” (Donald, 6.7.19), and he talked at length about how the relationship had improved his teaching and deepened his research. Dorothy expressed excitement about being able to do such in-depth work with faculty and how she saw that work contributing to best practices in teaching with archives. She also found the work more fulfilling than the usual generic archives session characterized by the question “Can [my class] come in for 50 minutes and look at some newspapers?” (Dorothy, 6.12.19). Finally, they both also viewed their relationship as being advantageous for proving their value to the university. For Donald, it was about expanding the mission of the writing program and fostering a robust culture of writing across campus, which he interpreted as not only teaching students about diverse disciplinary perspectives but also “bringing my writing classes to new venues, connecting my students with other folks, to the library, collaborating with other folks” (Donald, 5.1.19). For Dorothy, it was about bringing students into the archives and getting them to engage with little-used materials: “If you are an archivist and you are in a neoliberal university environment and you’re thinking about how to assert your value to the

administration, if you have no students in your archives, that's a really hard sell"  
(Dorothy, 6.12.19).

### **Co-Teaching Pedagogy as a Dance**

Donald and Dorothy's teaching approach embodied the coordinated pair, similar to the dance metaphor. Donald usually guided the lesson and slowly gave more power to Dorothy who tended to follow his actions, reinforce his directions, and take the lead, if necessary. This pair emphasized the importance of the process of working together and strengthening their partnership over time. Donald and Dorothy both defined co-teaching as two professionals sharing their individual expertise to enrich the classroom experience for students. While Donald was the primary instructor for the writing course, the classes visited the archives at least four times during a 10-week quarter, so Dorothy was a frequent co-teacher. When the class was visiting the archives, they always taught together, taking turns to lead different parts of the lesson as needed. They had a casual and easy teaching style between them, often making jokes and changing the lesson plan spontaneously. I observed two sections of their two-hour class for two sessions each (a total of 8 hours), and in all of those sessions, they employed active learning techniques with some lecture and lots of hands-on time for students to work with physical primary sources. Since the focus of these observations was the relationship between Donald and Dorothy, I used my observations to gain a better understanding of how they communicated in the classroom and their overall teaching style and approach. Since I observed two sections of the same course, below I present each session as one cumulative

narrative. What follows are detailed descriptions that exemplify the “pedagogical dance” of Donald and Dorothy’s class sessions.

**Session one with Donald and Dorothy.** My first observation session with Donald and Dorothy took place in the Archives Reading Room in the lower level of the library. There were 12–14 students in each of the class sections. The Reading Room is normally used for researchers consulting archival materials, so holding a class in the space required some creative maneuvering of furniture. The tables were placed in a square formation, with one side of the square open so that students could sit on both sides of the tables. The tables faced the side of the room with the entrance door, and there was a small table with a computer to the right of the door. Along two walls of the room were honey-colored exhibit cases that housed unusual artifacts from the archives. Since this was an active reading room, there was also a research desk in the corner with a staff member, and during the class, several people walked in and out of the room to access the collections housed in the back area of the archives.

Donald, who was wearing a purple-striped shirt and khakis, began the session by reminding students that this class would be focused on their individual research projects for the text-based interpretive assignment. They would be “digging in to primary sources” to get a sense for how those sources are different from secondary sources. While the primary sources that they would be using for the first part of class may not be exactly the sources they would use for their own individual projects, they were close in time and space to the period of their research projects. In essence, they were going to be using some example sources to get a better understanding of how to work with and interpret

archival research. Donald then noted that he was going to turn things over to Dorothy “to give her spiel on archives.”

Dressed in black leggings with a blue tunic-style dress with a black cardigan over top, Dorothy explained that archives were the “permanent, valuable records of the university.” She also cautioned students to remember that archives only get certain records and that there are often “gaps and silences in the historical record.” Since the students were doing research projects on college students around World War II, Dorothy also pointed out that it is often difficult to get records on individual students who attended the university but that it is possible to look at the overall experience that students might have had during a certain time period. By looking at a “smorgasbord” of resources on college students at the university, she hoped the students would get a taste for what was available. The students would be completing a worksheet while they looked at materials and answering questions about what they could learn from a certain item. Working in small groups, the archives mini-project assignment sheet asked students to explore a particular collection (selected by the archivist) and to answer the following questions:

- What are the uses for this type of source—what kind of information can a researcher reasonably derive from it? What does it let a researcher confirm in general?
- What are the limits of this type of source—what kind of information does it NOT contain? What questions might a researcher be left with if they were working with this type of source?

- What can you learn from your specific materials—how would you characterize students’ life at the university during the time period, based on what you can learn from the sources in front of you?

As the students left the room to wash their hands before handling the materials, Donald and Dorothy distributed four different kinds of materials around the room: old campus photographs of students, an orientation book, bound copies of the student newspaper, and the university year book. All of the items were from the 1940s or 1950s. As the students reentered the room, Dorothy reminded them about some rules for using the materials: “These materials are rare, so please be careful. Don’t turn the pages quickly or put laptops or other materials on top of them. No food or drink is allowed in the room.” Dorothy looked over at me while she said this as I had my laptop sitting on top of one of the yearbooks, and all the students laughed while I quickly moved my things. Donald asked the students to begin looking over the materials and noted that he would give them more information on the worksheet in a few minutes. In the second class, students did not immediately get into their groups, so Donald turned his back and said, “I’m going to turn around in a couple minutes and this issue will be resolved.”

While the students examined the materials, they laughed at the old outfits and poses or the outdated language used in the yearbooks. Donald and Dorothy had a small piece of paper that they shared between them where they had hand-written who was leading which part of the activity. They conferred briefly, scribbled some changes on the paper, and then began floating around the room and interacting with the students. When the students started to get a little loud, Donald and Dorothy decided it was time to give



them more formal directions on the assignment. Donald began by explaining that you can glean different types of information from photos than you can get from a yearbook. He then told them to consider this question: “How can you characterize what student life would be like from these materials?” Students had the rest of the class (roughly one hour) to look over the materials as a group and complete the worksheet. In the next class session, students would give an informal presentation on what they found. After Donald concluded his directions, Dorothy added, “I can answer some questions for you, but nothing *spoilery*.”

As the students worked with the materials, there was a loud din of chatter, and random questions kept popping up concerning whether these materials were available online. Dorothy responded that some materials had been digitized (or would be digitized) but not all. Donald added that there was no reason for the students to use Google; the purpose of the activity was to examine the evidence in front of them. The groups were largely engaged with the materials, reading aloud some of the text from the newspaper or yearbooks while their groupmates took notes on laptops. One student was reading humorous anecdotes aloud from the yearbook, and Dorothy nodded at them, saying, “I appreciate your dramatic reenactment of the text.” Donald and Dorothy chatted with each other about their hobbies, families, and pets while also mingling freely with the students to answer questions. Many of the students asked insightful questions, and Donald and Dorothy encouraged their lines of thinking. Talking with one student group, Donald noted, “Your questions are good. Write down your questions. That’s the point of the assignment—to see what you can know and what you can’t.” At the same time, Dorothy

was talking with the group of students with the photographs, and they asked her if it would be helpful to organize the photos by theme. She smiled and nodded and sat down with the group and began asking them questions to help them find themes in the photos. As they continued working, the students often gasped at the ads for smoking and drinking, the clothes that the students were wearing in the pictures, and the prices for various items listed in the ads. The students also commented on the activities mentioned in the newspaper and yearbook that they also were participating in as current students, such as sporting events, orientation, and tours. One student was so excited by the commonalities between the past and the present that he exclaimed, “This is a cool frickin’ thing!”

With 15 minutes left in class, Donald reminded the students to gather their notes and make sure they answered all the questions on the worksheet so that they would be ready for their presentation on their findings for the next class. Several students in the class had been rubbing their runny noses on their sleeves, so Dorothy brought out a box of Kleenex and a waste basket and discretely pointed out the supplies to the sniffing students. As class drew to a close, one student blurted out, “These materials don’t actually tell you what was happening! I have lots of unanswered questions!” Donald smirked and reminded them to write down their questions: “Some of the questions that you have might be answered by your colleagues with other materials. The questions are also preparing you to understand how primary and secondary sources work together.”

**Session two with Donald and Dorothy.** My second observation of Donald and Dorothy’s classes took place during the fifth week of the term (midterms). Donald

opened the class by noting that they would be working on their specific research projects for the rest of the term (after they completed the archives mini-project). For class that day, the students would have a little time to look over the same materials as last week and to prepare their notes to present their findings. Similar to last time, students left to wash their hands and then came back to get into the same groups. Dorothy began passing out the yearbooks, photos, newspapers, and orientation books to the correct groups. While the students were reviewing their notes, Donald gave them some pointers: “If you make big sweeping generalizations you will have issues. You will have limitations as there is some information that you can’t extract. Some of the other groups may be able to answer your questions from their source though.” Donald and Dorothy then got together and began planning for future class sessions while the groups finalized their presentations. In their conversation, Donald mentioned a specific archival document to Dorothy, and she immediately disappeared into the vault of the archives to retrieve it. It turned out to be a university fundraising campaign poster from 1962, which she informally showed to the students while they were still working.

After 20 minutes of review time, Donald asked the students to begin telling the class what they had found. The group with the photographs went first, but they became confused on the first question: “What are the uses of this type of source?” They wanted to list the pros and cons of using photographs, but Donald wanted them to characterize the photos by what they contained. “Look at the visual data and spatial relationships. You can see the interiors and exteriors of buildings,” he said. After much prompting, the students stated that they thought the photographs were staged because several of the same

people were in the pictures in different dorms and because the dorm rooms seemed too clean and had empty closets. Dorothy confirmed that the pictures were taken for promotional purposes to show the interior of new dormitories. After going through their findings, the group asked who the students were in the photographs. Donald asked, “How would you find that information?” There were some low murmurs among the students, and then one student suggested using the yearbooks to try to match the photos.

The next group talked about an orientation book they used, which was written by upper class students for freshmen. They also had trouble determining the use of such a resource for a researcher, but Donald asked them to think about “the information they could get from the source that they couldn’t get other places.” Initially, the students seemed to want to analyze the rhetoric of the source from their own perspective as current students, but eventually they understood that a source by students and for students could inform a researcher about the spaces and places that were important to students of that era. The third group then discussed the student newspaper and what they thought was important. Dorothy urged them to consider what the newspaper said about how student organizations functioned and what day-to-day life may have been like. The students noted that the newspaper did not always give context for some of the news articles, and they wondered what happened to some of the buildings that were being planned to be built on campus (since they did not think those buildings existed in the present). The fourth and final group had the yearbooks and noted that in addition to indicating who attended school in that year, one could also see the clothing and hairstyles of the era. They also indicated that much of the yearbook was dedicated to fraternities and sororities.

After the students completed their presentation, Dorothy helped the students make connections between primary and secondary sources, saying, “As you look at archival sources, ask yourself what’s there. What’s missing? What do you need to collect information on to make sense of a photograph or a yearbook?” Donald then asked the students to complete a reflective writing activity on how archival sources would be useful to them for their own research projects. Dorothy collected the materials to put them away while Donald reviewed his notes for the class. Donald concluded class by telling students, “Your research project should be on some aspect of student life at this institution during the 1940s or 1950s. Archival materials are a treasure trove of data that you will not find anywhere else, and they will be very helpful to your research.” A few students expressed concern that they could not come up with a topic, and Dorothy chimed in that she was happy to play “intellectual matchmaker” if they could tell her their interests or passions.

### **Summary**

Dance as a metaphor evokes connection, freedom, creativity, improvisation, beauty, emotion, and meaning. It evokes the relationship between limits and freedom, form and spirit, structure and story, logic and expression, order and improvisation, function and elegance, focus and abandon, purpose and play, rhythm and balance, unity and diversity. Donald and Dorothy are attracted to co-teaching because they recognize its potential to be all of these things. While they might struggle sometimes to reach the heights that the metaphor promises, they believe in the ideals and are having lots of fun along the way while creating an enriching experience for their students.

## **Chapter 6: Jane and Alice—Yin and Yang**

Jane and Alice have been co-teaching ENGL 3800: Bibliography and Research Methods on and off for the past 20 years at a private university in the Rocky Mountain region. For this study, they co-taught one section of the course with 17 students in the fall quarter of 2019 (September to November 2019). Alice is a professor and the arts and humanities librarian at the library and provides reference and instructional services for faculty and students. She has extensive co-teaching experience, teaching this course and several other courses as an embedded librarian over her tenure at the university. Alice has an MA in art history and a master's degree in library and information science. She publishes widely on literary research strategies, reference services, and support services for graduate students. Jane is a professor of English specializing in 19th- and 20<sup>th</sup>-century British literature, with an emphasis on Virginia Woolf and her Victorian predecessors. She has an MA and PhD in English. While she teaches a number of courses in English, she has co-taught the bibliography and research methods course in the fall on and off for the past 20 years. She also has had other experiences with co-teaching, having taught a course with an art history professor and another one with a theater professor.

The Bibliography and Research Methods course is a cross-listed graduate and undergraduate class taken as an elective by PhD students, master's students, and undergraduate honors students to learn library skills and research methods pertinent to English, literary studies, and creative writing. While undergraduate students are allowed

to enroll in the course, the majority of students are usually MA and doctoral students. The course is taught once per year in the fall, with Jane as the faculty member of record and Alice co-teaching the full quarter-long class as part of her liaison role.

The university where Jane and Alice work sits within the city limits of a major city in the Rocky Mountain West, and while it is an urban campus with a student population around 10,000, it has the feel of a small liberal arts school. It is a regal setting with a rich landscape of fully-matured trees, towering brick buildings, red cobble stone pathways and copper-plated domes. The surrounding residential community has a suburban feel with a mix of large, newly built homes and more modest post-World War II brick, ranch-style houses.

### **The Metaphor of Yin and Yang**

The relationship Jane and Alice share can be captured by the metaphor of yin and yang, symbolizing both the uniqueness and the unity of the two teachers. In Eastern thought, yin and yang represent two opposite, yet complementary forces or principles, whose interactions impact all aspects and phenomena of life (Adams & Cessna, 1993). In the same way, Jane and Alice had distinct, yet blending and essential, roles in their co-teaching relationship, based on their skills and knowledge. The yin and yang metaphor includes the following ideals: they are interdependent and exist only together, they support each other and are usually held in balance, and part of yin is yang and part of yang is yin as there are traces of one in the other.

Jane and Alice share a passion for helping students and for literature and research, and their many differences, while stark, are also complementary. Alice has short, brown

curly hair; dresses fairly casually in pants and colorful T-shirts; and has an intensity and passion about her when she speaks about her work. Jane, also has short, curly hair that is going gray; dresses immaculately, often in skirts and dresses with coordinating jewelry; and speaks with an easy-going, yet formal manner when discussing her work. They are both extremely talkative and opinionated—on many occasions during our interviews, I had to get each of them back on track to the main topic of conversation. Alice is very methodical in her approach to teaching. She likes to plan, plan, and plan some more. When she lectures, she is exact in her language and repeats herself to make sure that students understand. Jane loves discussing theories and quoting well-known scholars and often gets so excited about ideas that she loses track of time. There is notable tension (you might call it creative tension) in their relationship, and throughout their interviews, they each pointed out to me the things that bother them the most about the other. Alice is particularly direct and frank in her communication, and she noted, often with frustration, the arguments she has had with Jane over the years. Jane, for her part, seems to be less bothered by the tension in their relationship; however, she knows it worries Alice, so she tries to patiently listen when Alice has questions and suggestions. They are both very strong, almost willful personalities, but they have been teaching together for a long time, and when working with them throughout this study, I got the sense that they strongly value their collaborative partnership and friendship and are willing to go to great lengths to work out their issues so that they can deliver this course for students. In fact, in watching this creative, and often playful, tension play out in the classroom, it seemed that the students also recognized the benefits of this unlikely pairing.



## **The Yin and Yang of the Co-Teaching Relationship**

Jane and Alice defined their co-teaching relationship as two professionals with specialized abilities working together to stimulate new and creative ideas to help students gain a better understanding of the research process. They strongly believe that co-teaching is the best way to teach students research and writing skills. Each mentioned that the course is an elective class and that its purpose is often questioned by other members of the faculty. They are united in their fight that students need this course, and they both spoke at length about the challenges in making sure it was on the schedule each fall quarter and about their worries that it might be canceled in the future.

The course has been taught by several different English faculty over the years, but Jane was and has been the primary champion for offering it among the English faculty. In describing why she initially wanted to co-teach the course with a librarian, she said, “I’m not very good with technology, and research requires good technology skills. Plus, the way you access materials is always changing. I knew the students would get a better experience if I had help.” While Alice’s primary motivation is now to help students, her initial foray into the co-teaching partnership was to seek out new work opportunities:

I’ll be frank that when I started work here, the university was basically going to go under. [My job] was basically a very boring job. I had no responsibilities. I was looking for a challenge. So, I was really excited to be part of this. (Alice, 9.6.19)

Alice also explained how she continues to find teaching the course to be particularly fulfilling: “I feel very connected to the students. In the one-shot ones [one-time library

workshops], it's very difficult to create a relationship with students" (Alice, 9.6.19). In fact, the primary driver for both Jane and Alice in teaching this course is students. They believe that students need this content, and through their shared expertise they can truly help students learn. Jane, in particular, noted the many benefits of the co-teaching model for students:

I think students, first of all, get two perspectives on this basic level. It's always useful to read two newspapers from some different, slightly different slants. So, I think the two perspectives are important. They've also witnessed both collaboration and occasionally some friendly arguments, certainly not inappropriate, but some disagreement certainly. And so, I think secondly, they benefit from watching this collaborative model. Really, it's the two different perspectives and the collaboration that I think are absolutely crucial. And, I guess, thirdly, that each professor brings a different skill set. (Jane, 9.4.19)

It is this passion for helping students that really focuses their relationship on the curriculum of the course. They spend considerable time and energy revising the course each year, making new assignments, and co-grading student work. In describing their yearly planning process, Alice stated,

We sit down together. We go through the syllabus section by section, but we always mess up [the grading structure]. We always have a calculator because we have to change the points when we revise assignments, and we are both bad at math. Then we go through the calendar, and we decide, you know, what we want

to do and who will teach what. For example, we introduced a segment about going to the archives, which Jane always loves. (Alice, 9.6.19)

One significant change to the curriculum over the years that they both discussed in depth was using the ACRL Framework to add new assignments and to refocus the nature of the course. Alice was very proud of how she had suggested the framework to add meaningful reflection to the course:

We changed the assignments so that they are much more reflective and much less about process and much more about thinking about the process and reflecting on that. She [Jane] loves the framework. We do three of the frames, and we build them in to the assignments. (Alice, 9.6.19)

Jane was particularly interested in the ACRL frame “Research as a Conversation” since she felt that it dovetailed very nicely with Burke’s theory of “unending conversation.”

The Burkean parlor is a metaphor introduced by philosopher and rhetorician Kenneth Burke, and many English and writing professors employ it to characterize collaborative efforts to help students not only improve their writing but also to view their work in terms of a larger conversation. Jane noted that “the whole idea of conversation” and “putting texts into conversations” was a fundamental element of the class and that she was very pleased to see the cohesion between best practices for teaching writing and best practices for teaching library research (Jane, 11.25.19).

While designing the syllabus and the assignments was a truly collaborative experience for both Jane and Alice, there was some tension while co-teaching because of the nature of their teaching styles. Alice explained that Jane was not always cognizant of

time limits during class, which sometimes made her feel like her content was not important.

Jane talks a lot. She will not stop [talking], so I have to set boundaries about time and class. The work on the syllabus is very, very collaborative, but she will be in the class and I feel cut out. You feel like you have to hold her to task to keep on time. I have to say, let me talk about this first and then we'll talk about that.

(Alice, 9.6.19)

Jane, who was not initially aware of this issue, described how she and Alice finally came to a truce.

There was a period a couple of years ago where we had maybe not an altercation, but we had a pretty serious misunderstanding—not so much about who was doing what but [about] my not acknowledging her presence or work in the class and being too domineering, which I think was probably true. I was completely unaware of it, so I didn't know why she was miffed. Finally, we had dinner one night on purpose to work this out, and it was really useful. (Jane, 10.21.19)

Despite this tension, or perhaps because of this tension, Jane and Alice had a real appreciation for the roles that they each played in the co-taught course. Jane described her fear of technology and how she was grateful for Alice's expertise in database searching and also in using Canvas: "I appreciate how Alice very methodically covers searching and the wonderful way she delivers her content" (Jane, 9.4.19). She was also appreciative of how Alice was "extraordinarily generous with her time with the students" (Jane, 10.21.19). Jane said, "She will be tireless with helping students. She will work and

work with them” (Jane, 9.4.19). Alice, in turn, also expressed how she was impressed by Jane’s knowledge of her discipline and how she could respond to students’ questions about theory immediately during class. Describing how she occasionally struggled to understand doctoral students’ research topics, Alice said, “I’m glad that she’s [in class] because if she weren’t there, I’d be very frightened, and she’d probably be very frightened if I wasn’t there when students are trying to find specific things” (Alice, 10.22.19).

Much like their approach to teaching, their approach to grading was also a source of friction and admiration of their defined roles. Alice spent a great deal of time in her interviews with me expressing her frustration over grading. She felt that Jane did not give students feedback quickly enough and also felt that her expectations were too high. She described a new structure for grading that they were using that she hoped would help alleviate the issue: “This year we blocked off the two hours after the class so that we can grade together, especially because we have so many students” (Alice, 9.6.19). When talking about the friction in relation to grading, Jane acknowledged that Alice had helped her realize a new method for grading “based on improvement” over the course of the quarter, instead of strict writing standards (Jane, 10.21.19). She also felt that their misunderstandings about grading were related to “how they structured their time” (Jane, 10.21.19) as she often liked to grade late at night while Alice wanted to grade during a more clearly defined work day. Overall, blocking time off for grading after class seemed to be solution that was working for both of them.

Even though grading caused some consternation for both of them, they had surprisingly clear ideas about their roles in the grading process. Alice explained how she looked at source types and citations and overall flow and how she relied on Jane to be the content expert: “I look at the research process and I look at the citations. I look at the structure. She will give feedback on the specific theories and the relevance. She really is the disciplinary expert, so we each have our expertise” (Alice, 9.6.19). Jane noted how Alice was invaluable in helping the students with sources, but she also found it essential that the students were getting an outside opinion on their writing.

She [Alice] reads every assignment, and she gets really interested, as I obviously do, in the nature of their projects. She kind of goes that extra mile to ask them thoughtful questions. Also, many times they’ll want to meet with her individually to talk about further research in certain databases. (Jane, 10.21.19)

When asked to describe the nature of their long-term co-teaching relationship, they both noted how the balance between tension and admiration resulted in growth and learning. Alice talked about how her identity as a librarian had shifted over time because of the extensive teaching experience with Jane. “I was actually afraid of teaching [in the beginning]. I didn’t see myself as a teacher” (Alice, 9.6.19). Now, she feels that she is really contributing to the course and students’ learning, and she relishes how “the students are really learning and really expanding and finding things all through the skills were giving them and the assignments we’re giving them” (Alice, 10.22.19). Jane believes that Alice’s contributions to the class were providing “a whole new sense of discovery” for both her and the students (Jane, 10.21.19). She noted that she has learned a

lot from Alice about how to conduct research and that she “really enjoys the cross disciplinary work a lot” (Jane, 11.25.19). Jane summed up the yin-yang metaphor very astutely in describing how the tension around their different personalities and approaches created a unified experience for students:

We’re very different in our approaches and I think in just our lives, but I think that’s been complementary. The other thing I think is good is that while once in a while we have dinner together and are social, we aren’t what I would call constant friends. I think that’s really good. Not that we’re unfriendly, but I think there’s probably a little bit of good distance [between us]. You shouldn’t be best friends with somebody with whom you collaborate like this. (Jane, 10.21.19)

### **The Yin and Yang of Co-Teaching Pedagogy**

Jane and Alice’s teaching embodied opposing but balanced approaches, similar to the yin-yang metaphor. Putting their co-teaching beliefs into practice was a satisfying, albeit tricky, endeavor. Jane and Alice were able to establish a co-teaching relationship that worked for both of them, and they shared the majority of the teaching time for the quarter-long class. Creating parity in their relationship was not an easy task with the different roles they held, but they fairly evenly split the instruction time based on the topics that were going to be covered. While Jane was considered the primary instructor for the course (it was part of her course load), Alice was involved in every aspect of teaching the course. They had very different teaching styles, which merged to create an engaging and intellectually rigorous class for the students. Their classes featured a mix of some lecture and database demonstration, but with a heavy emphasis on group discussion

and individual consultations. There was sometimes light tension between the pair while teaching as Alice would remind Jane of the time or as Jane would ask Alice to do something she had not planned on showing. Nevertheless, the students flourished in this dynamic, asking questions of each instructor as appropriate and giggling when there seemed to be some minor confusion. Since the focus of this study is on the relationship between Jane and Alice, I used my observations to gain a better understanding of how they communicated in the classroom and of their overall teaching style and approach. I observed three two-hour class sessions, and below I present each session as a separate narrative. What follows are detailed descriptions of the class sessions with Jane and Alice that exemplify their yin-yang approach to teaching.

**Session one with Jane and Alice.** My first observation of Jane and Alice began on September 11, 2019. The date was not forgotten by the students as many of them were talking about where they were that infamous day as the class began to gather. The class met in a seminar room on the upper floor of the library. The tables and chairs were arranged in a large square, and there was a large rolling flat-panel monitor on one side of the room for projection. There were windows with blinds on the west wall and glass walls on the east wall overlooking library study space. Jane and Alice sat on the north side of the room in order to be able to hook their laptops up to the panel for demonstrations.

Alice explained that the purpose of that day's class was to prepare for their first assignment and that she was going to demonstrate how to use the library's website. She quickly reviewed how to search the library's online catalog and when to use subject headings to improve a search. "Subject headings are your friends!" she said. The first



assignment involved searching for their topic in the online catalog, *MLA International Bibliography*, the state-wide union catalog, and then *WorldCat*. For each source, the students needed to find a specific number of sources to create an annotated bibliography. Alice asked students answer a reflective prompt at the end of the assignment:

The research process is an iterative process that depends on you being flexible as you try different research databases and try different search strategies. In this mini literature review search on your topic, how and why did you change your approach to searching in each of the four databases you used? What did you discover that informed your search processes as you progressed?

After showing the online catalog, Alice took students to the A–Z list of library databases and pointed out the databases that she was going to show: *ABELL*, *JSTOR*, *Academic Search Complete*, and *MLA International Bibliography*. She also showed students how to search to quickly find the database they wanted. “Oh!” exclaimed Jane, “I didn’t know you couldn’t do that! I’ve been teaching this class for 20 years, and Alice still shows me new things!” Alice smiled and made a humorous remark: “Well, maybe if you paid more attention . . .” As Alice demonstrated each database, Jane interjected helpful tips: “Be sure to keep a diary of your search. Take notes on what works and what doesn’t.” While Alice demonstrated each database, she called on different students (while practicing to see if she would remember their names) and asked for search examples. Jane graded papers, but frequently popped in with a relevant comment, or she asked Alice to show a particular feature. When Alice searched for a particular student’s topic and

found a good source, Jane cheerfully interjected, “It’s not cheating to use that great example that Alice showed you!”

During one part of the demonstration, Alice went to the whiteboard to explain Boolean operators but then realized that she had forgotten to bring whiteboard markers. A student sitting up front reached into their backpack and pulled out a set of markers to give to Alice. Alice was surprised but happy and then went to the board to draw her Venn diagram. While she was explaining Boolean operators, a student interrupted, “Why were you using parentheses in your search?” Alice then went into a lengthy discussion about phrase searching and truncation, and the students all eagerly scribbled notes. The students also learned how to find and request materials from other libraries. After the students had seen dozens of search interfaces, Jane noted, “Don’t tear your hair out if you don’t remember all these things!” Alice then told the students a story about how over her many decades as a librarian, she had had to learn new technology and how she also finds it difficult. “I still prefer card catalogs!” Jane stated.

Alice asked the students to spend time searching the online catalog and databases on their own: “If you have a question, just raise your hand and I’ll come over,” she said. One student seemed frustrated and said loudly, “How many sources do we need to find? The syllabus has different numbers in different parts of the assignment.” Jane and Alice simultaneously giggled and smiled. Alice stated, “We have this problem every year! Neither of us are good at math!” Jane talked students through the assignment directions and noted where students should fix the errors. The students continued searching and Jane walked around passing back graded papers and giving tips to students. One student

asked loudly (almost thinking out loud), “Are we really supposed to read all of these sources?” Jane replied frankly, “You don’t need to look at all the articles, but you do need to skim. It will be hard to write an annotation without reading some parts of an article.” Alice passed out a tip sheet on MLA citations and then walked over to Jane to remind her that class time was almost up and that she still needed to discuss the required reading for that week.

Jane began a short lecture on the craft of research and writing for community. As she was talking, she mentioned many students by name and made a specific reference to their topics. She explained that they needed to “honor the dignity of their readers” by “recognizing diverse viewpoints.” “Your research may not change the world,” she said, “but you are developing new knowledge.” She went on to explain how they needed to find their own voice as writers but still acknowledge their opposition. She stated that they could not effectively disagree with someone if they could not understand their worldview. “How do you correct flawed understanding?” a student asked. The class then had a lengthy discussion on right and wrong and the merits of subjective worldviews. Jane ended class by noting that she would “hound” students until they had narrowed down their topics: “Why is your topic important? Use driving, active nouns in your research question.” Alice patted Jane on the arm to indicate that class time was up. Jane quickly reminded students that for next class she wanted them to write out their research question using the three-part formula she had given them: “It may seem formulaic right now, but it will guide your research focus.” Alice added that students should not “panic” and that they should visit her if they had questions about searching.

**Session two with Jane and Alice.** Alice began class by telling the students to get their laptops out. While the students gathered their materials, Jane expressed that her favorite assignment was coming up. “Have you ever done this kind of assignment before?” she asked. The majority of students shook their heads, and Jane continued by explaining that past students tended to choose a more recent decade for the assignment but that it would be a better idea to choose a decade for a specific reason. Alice reiterated that all the assignments over the quarter would apply directly to the mid-term. “All the work is cumulative,” she said. “So, do pick a decade that works the best for your project.” Most students in the class were working on their prospectus for their dissertations or master’s theses, and a few undergraduates were working on senior projects. The assignment asked them to conduct a 10-year review of their topic by using an evaluative annual review resource (such as *American Literary Scholarship* or *Year’s Work in English Studies*). Students then needed to create an annotated bibliography of at least 12 significant, critical works. After explaining more about the 10-year review assignment, Jane asked students to get into pairs in order to look over some online and print sources and to discuss what source might work best for their project and decade. The students busily chatted while Jane and Alice consulted each other about their plans for the rest of class time.

After 20 minutes of group chat, Alice brought the class back together: “Ok, guys. What did you find? What group wants to go first?” Each pair took turns discussing their source and indicated how well it worked or did not for their project. As each pair talked, Alice or Jane interjected comments, praise, and advice for the students. Alice, in

particular, would often borrow the print source from a group and explain how to use it for everyone to see. For one particular group, she also demonstrated how to use the online version of the resource: “The online search is really terrible so I wanted you to see what it looks like in print too.” The students continued to share their sources and questions, and Alice demonstrated the corresponding online resources. Both Jane and Alice cheerfully shared with the students how much research had changed since they were students. They seemed to want the students to understand that research is a long, iterative process; Jane also wanted the students to appreciate how much easier research was to do “these days.” Toward the end of the demonstration and discussion of the review resources, one student blurted out, “This seems like a lot of work to write one of these reviews!” Jane smiled and nodded, “If you are a writer for one of these annual review resources, you read and read and read and read and then after writing the article, you hope at least one person reads what you wrote.”

After several groups had shared their results, Jane explained more about the purpose of the assignment: “Part of the goals of this assignment is to help you expand your understanding of a topic so you can expand your search for sources.” Alice added, “You don’t cite the annual review resource itself. You use it to find new sources.” Jane continued, “When doing this assignment, you may not search for your exact topic. You want to look for themes and shifts in understanding in the discipline.” A student then asked about *ABELL: Annual Bibliography of English Language and Literature*, and Alice went to her computer to demonstrate some searches. She asked the student to help her come up with keywords to demonstrate the search, and then she frowned at her computer:

“Be good!” After typing in the search, she joked that she often talked to herself or her computer while she searched. The students all giggled, and Jane smiled affectionately at Alice. Once all the groups were finished presenting and when Alice was satisfied that she had shown all the major features of the sources, she explained, “Try searching again in your preferred resources for 10 minutes, and then we will take a break. When we come back Dr. [last name] will provide some more guidance on this assignment.” Before the students went to break, one of the doctoral students asked, “Does our decade need to be 1980–1990 or can it be, like, 1995–2005?” Another student piped in, “Do we need one source per year for our decade?” Jane sighed (in a loving way), “Just a reminder that you are looking for themes across the decade. There are no requirements on the types of sources. Any range of 10 years is fine.”

After the break, the students wandered back into the classroom while still finishing their snacks. Jane commented, “I always find it so hard to stay focused while searching. Everything is so interesting that I get distracted!” The students nodded and smiled and shared tidbits of random information that they had found interesting while searching. Alice reminded Jane that they did not have time for “chatting” and then began explaining that she was going to talk with them about different types of sources that they would encounter while doing research. “What is an example of a Union Catalog?” Alice asked. One student volunteered, “Prospector.” They discussed catalog types and then moved on to standard additions and translations. Jane was still interested in reminiscing about her research experiences and asked, “Have any of you used a card catalog?” Alice frowned while Jane explained how much she enjoyed the tactile experience of looking up

books that way. One student chimed in that card catalogs are beautiful and that she wondered if the library had any that they might want to get rid of. Alice relaxed for a moment and noted that most of the card catalogs were gone unfortunately but that she thought they were nice for storing wine bottles. Alice then demonstrated the online catalog, including how to use subject headings to find specific types of resources such as correspondence, bibliographies, and diaries. While she was showing students how to search, Jane walked around whispering to various students about different sources that might be helpful for their projects. As class time ended, Alice asked, "Does anyone feel like they are drowning?" "More like dying of thirst!" came the reply from one student.

**Session three with Jane and Alice.** Jane began class with a discussion of their midterm project, saying, "This should be one of the easiest midterms you will do because you have already done most of the work." A student raised their hand and said that the directions for the midterm were a bit confusing. Jane sighed and said that she detested making them comply with too much structure: "I just want to give you an opportunity to summarize what you have found so far." Alice interrupted her to give the student specific feedback on their question about how to organize their midterm assignment. Another student asked if they were expected to read whole books. Alice answered by offering a suggestion to find book reviews to help understand a source without needing to read the whole thing. More discussion about the midterm assignment ensued and then Jane stopped and asked, "Are you all doing okay?" One student sighed and replied, "I'm tired, but my spirit is willing!" Jane replied, "Well, you are going to hate what I will have you do next, but it will be good for you." Jane then asked them to take their three-part

research statement and revise it in order to get rid of excess words and adjectives. “We are going to read them aloud to each other and get feedback,” she stated. The students then spent time quietly revising their statements while Jane and Alice chatted with each other and floated around the room answering questions.

After the students indicated that they were done, Jane asked each student to read their original statement and then their new statement, after which their classmates would ask questions. Alice sighed and pointed to the clock on the wall, so Jane revised her directions, “We will allow time for one question for each person.” One by one, the students read their research statements, and Jane gave them feedback. The students also asked questions of their classmates, and she pointed out when their peers had similar topics or research interests that intersected. The class then took a break before coming back to talk about their cognate areas.

Upon returning from break, Jane explained the genre assignment, for which students needed to compile a list of five essays, book chapters, or books on their chosen genre. They then had to explain their choice of genre by answering these questions: “How have scholars or creative writers defined this genre over time? What specifically distinguishes this genre from others? Give two examples of forms.” Jane noted that she wanted to go around the room and have each student share what they thought their cognate area would be and why. A student asked about the purpose of the assignment. Jane told them that the assignment was intended to help them refine their research question by understanding how different disciplinary perspectives might contribute to their argument. She asked, “What do you need to learn more about with regards to your



research question?” Alice indicated that she would be taking notes as they talked so that she could go over useful subject databases in a future class. She also promised the students that they would see their past assignments back soon and she poked Jane in the arm, saying, “You need to get those graded.” As the students discussed their focus areas, Jane excitedly gave them feedback and asked questions. She also quoted from articles that they were reading in class to solidify her points. When one student mentioned a source that might be helpful for another student, Jane said, “Sharing sources is not illegal! Help each other!” She then said she wanted to end class by talking about genre theory, and Alice pointed out that class time was almost up. She smirked at Alice and then told the students she wanted to talk about it for five minutes. She said, “What was your conclusion about the article and the theory?”

### **Summary**

The Chinese concept of yin-yang is a wonderful metaphor that beautifully illustrates a balanced, integrated approach to teaching. Yin-yang describes seemingly opposite forces that are actually complementary and interdependent. In Western society, yin-yang is often referred to as “yin and yang” and brings to mind simple contrasts such as dark and light, male and female, logic and emotion. But yin-yang is much more than mere opposites. Rather, it represents the idea that the interaction of contradictory forces not only creates harmony but also makes for a greater, more complete whole. Our tendency is to see these conflicting priorities or divergent goals as negatives when, in fact, the integration of these competing ideas creates a natural equilibrium, whereby problems get solved and solutions benefit both teachers and students. Jane and Alice

represented a truly symbiotic pair. They balanced each other in the co-taught classroom, with the pair learning to merge their roles so that their relationship became fluid and natural. Jane and Alice enacted different practices together in order to enrich and enhance their partnership and to meet their teaching goals as well as students' expectations.

## **Chapter 7: Julia and Eric—Cartographers**

Julia and Eric were in their first co-teaching experience at the time of this study (August to December, 2019). They were co-teaching one section of a first-year experience course called Identity, Culture, and Community with 20 students in the fall semester at a small, religiously affiliated school in a rural Midwestern town. Eric is the Head of Research and Instruction at the library as well as the liaison for the sciences (biology, chemistry, nursing, and physics). Eric has a master's degree of library science and has been at the college since 2013. He conducts research in biblical studies as well as user design and accessibility for library websites and information literacy assessment. He had co-taught the class for six years with different teaching partners, but this was his first time teaching with Julia.

Julia is an associate professor of history and started at the college in the fall of 2019. She was teaching the first-year experience course with Eric for the first time. In addition to general education courses, she has taught history and English courses and conducts research about Latin America, Asian Americas, and world and transnational studies. She has a PhD in History and also writes short, historical fiction in addition to her scholarly pursuits. Julia had one previous co-teaching experience with another faculty member and a librarian at a previous institution.

The first-year experience course taught by Julia and Eric is part of the college's core curriculum and is required of all incoming first-year students. The course is

structured so that all courses are co-taught by a teaching faculty member (Julia) and an administrative faculty member (Eric). The students are also preselected to be enrolled in different sections in order to create diverse cohorts of students. Julia and Eric were paired by the college's core courses director. Julia taught the course as part of her course load, and Eric was paid as an adjunct for his time teaching the course.

The college is a private Christian liberal arts college with an enrollment of under 1000 students. It is known for leadership in intercultural and international education, sustainability, and social justice, and it is located in a rural Midwestern town. The college places a strong emphasis on peace, justice, nonresistance, and reconciliation in accordance with the beliefs of their affiliated denomination. The college's 135-acre campus—filled with trees, squirrels and bikes—is located just off a river in a small, rural town (pop. 30,000). The campus is welcoming and quaint, with a mixture of historical brick buildings and more modern architecture. Prominent railroad tracks run down the middle of the main green. The college is fairly integrated into the local town and it is not uncommon to see horse-drawn buggies and Amish families visiting stores and restaurants.

### **Cartography as a Metaphor**

The relationship Julia and Eric shared can be captured by the metaphor of cartography. First-year experiences courses at universities are often designed to help students learn how to navigate their college experience. Julia and Eric embraced the mission of guiding students in their academic journey, and they served as “cartographers,” not only for their students but for each other as well. In this first time

teaching together, the defined focus of the first-year curriculum gave them an easy map to follow, but they were willing to experiment with new methods and activities for engaging students and were open to showing each other alternative paths to meet the learning goals of the course.

Julia and Eric had very different disciplinary backgrounds and levels of experience, but they shared a commitment to the mission of the college. Eric, with reddish brown hair, a beard, and glasses, had a casual, easy-going manner of speaking, filled with Midwestern euphemisms and personal anecdotes. At the time of this study, he was a new parent and was struggling with getting enough sleep, but he was eager to share his experiences of co-teaching as a librarian. He was also an avid cyclist commuting to work each day via bike, even in the snow or pouring rain. Julia, who had long brown hair and glasses, was new to the town and the college and enjoyed telling me about her first impressions working and teaching at the institution. She was very candid in our discussions telling me about how much she enjoyed working with first-year students but how she wished she had more time to focus on her research agenda for history. Since she had only recently moved to the area, she also shared her struggles with living in a small, temporary apartment downtown with her family.

In all of my interviews and observations of them, they both embodied the mission of the college. They were warm and welcoming, always offering me coffee, making sure I knew where to park, and inquiring about my travels. I did most of my interviews and observations with them on a Friday and a Monday, and they both checked in with me about my plans for the weekend and recommended restaurants to eat at or places to shop.

They both had collegial, accommodating, and kind personalities and in many ways seemed to be similar in their outlook on life, though Julia had more misgivings about co-teaching than Eric. In the classroom, they exhibited the same tendencies, sharing their speaking time equally and being open and flexible when students seemed tired or wanted to talk about a different topic.

### **The Cartography of the Co-Teaching Relationship**

Julia and Eric's co-teaching relationship was not defined by a shared disciplinary area or even a desire to teach students a certain set of skills, but instead by an almost altruistic support of the common good of the institution. They were both teaching a core course outside of their subject expertise—the course was not connected in any way to library research or history. While Eric was being paid a small stipend to teach the course, it was entirely voluntary on his part to choose to participate. Julia was hired to replace another history professor who had already agreed to teach the first-year experience course. So, while it was part of her teaching load, she expressed a strong commitment to the vision and mission of general education and to the core structure of the college. It was merely a stroke of luck that they were paired up to teach the course together and happened to get along very well. Julia knew she would be assigned to teach with a colleague from another unit on campus and was delighted that she got a librarian. She said, "I really just like librarians. I'm a historian, and so librarians have just always been very helpful to me. I have tended to be to gravitate to librarians at every place I've worked" (Julia, 10.28.19). Eric had been teaching the course with a different instructor for the last six years and had learned to adapt to various teaching styles and personalities,

but he was pleasantly surprised by their compatible personalities and approaches to teaching: “She’s approachable to talk to and I do not feel intimidated in talking with her about trying new things or making suggestions. We have a good chemistry while leading the class” (Eric, 11.8.19). Julia also appreciated that they seemed to have a similar approach to teaching: “We’re both kind of really low key and laid back and that helps a lot” (Julia, 10.28.19)

Since Julia was new to the campus and to the core curriculum, she was relieved to be working with someone as experienced as Eric and noted how he helped with understanding the curricular structure and the purpose of the assignments. Eric also expressed how much he enjoyed the role of “onboarding” Julia to the “campus culture and values” (Eric, 10.25.19). Julia and Eric were both very experienced at co-teaching so they both came to the relationship with a shared understanding that compromise was necessary. The nature of the structured first-year experience course also helped clearly define their teaching roles. Julia noted that she was enjoying the experience in part because “the roles are very clear” and indicated that “team teaching [can get] into hairy issues when you don’t know who’s doing what. Like when both people are responsible for grading” (Julia, 11.11.19). Per the structure of the core curriculum, Julia was assigned as the lead instructor and was responsible for grading and advising students. Eric noted that while their roles had been defined by the college over the years, he had played a number of different roles, from support staff to lead instructor, depending on the faculty member he worked with: “I just sort of adapt to what they want to do or what they need” (Eric, 10.25.19).

This level of compromise was also visible in how they both altered their teaching style. For example, Eric noted that he often preferred to make detailed outlines for teaching but that Julia was “more of an on-the-fly instructor, which is just fine” (Eric, 10.25.19). When describing her own teaching style, Julia said that she was “kind of a control freak. I like to just do my own thing” (10.28.19). She found teaching from a pre-planned curriculum to be “odd” but found the whole experience easier because she was working with Eric: “I enjoy his style. He’s very quirky and energetic and easygoing and he thinks on his feet” (Julia, 11.11.19). They both had the notion that the other person was a really laid-back instructor, but my impression was that they had both adjusted their preferred teaching styles to accommodate the other person and to support the mission of the course.

As part of the adaptation, they also had a loosely defined and dynamic planning structure. In describing their communication style, Julia said, “We play things by ear a lot, but we’re regularly checking in. Sometimes we email each other and sometimes we just meet in person. We see each other on campus regularly” (Julia, 10.28.19). Eric noted that their style was “organic” and that they often tried new approaches: “We’re not just going to do this thing that we’ve done that we know works. We are always, like, let’s try some different things” (Eric, 11.8.19).

While they were both adapting to each other’s teaching style, they did share a common understanding about the purpose of the course, and they enjoyed learning new things from each other and their students. Eric relayed how pleased he was to find that he and Julia had the same understandings of the required readings for the course, and he



appreciated the more scholarly approach that she brought to the course. Julia appreciated the personal stories that Eric shared with students and was impressed with his technology and research skills. Due their flexible natures, they created a seamless support structure for students. Julia indicated that she thought students saw them as partners in learning: “They see us as like a teaching team. We’re both their teachers” (Julia, 11.11.19). She also noted that because the course dealt with identity issues, the students often bring up painful experiences and struggles and that it was common for students to stay after class to talk to both of them to ask for advice. Eric was happy that the students felt comfortable coming to him as that was his main goal for teaching the class: “My goal is to make sure I’m there for the students. If I get to lead the class or co-design the curriculum, that’s awesome, but if not, I will still do all I can to support my colleague, the students, and the learning goals of the course” (Eric, 11.8.19).

Overall, Julia and Eric’s co-teaching relationship was one of compromise, flexibility, and adaptability in the service of helping students find their place in college. Eric described his teaching philosophy as creating “a safe, nurturing, and loving environment” (Eric, 10.25.19). While Julia often wished that she could have more creative control over the curriculum, she was glad to connect with first-year students and “help them find a place on campus” (Julia, 11.25.19). They were also supportive of each other’s teaching journey and were thankful for a campus culture that was “egalitarian,” “collaborative,” and “affirming” (Julia and Eric, 11.25.19).

## **Cartography as Pedagogy**

Julia and Eric defined co-teaching as two professionals completely sharing responsibility for the classroom with discussions focused around student growth and how best to achieve it. They believed that their unique abilities should be utilized to foster students' individual strengths, with time spent on small-group discussion and large-group sharing. They felt that students in co-taught classrooms could receive more attention than in traditional classrooms and be exposed to different teaching methods that meet the wide range of ability levels and needs. Moreover, Julia and Eric believed that instruction could become seamless and have a natural flow as two individuals worked together.

Julia and Eric normally co-taught every class (unless one of them was sick or had a conflict). They divided the 50-minute teaching time fairly evenly, taking turns running different activities or reminding students about upcoming assignments. Their classes often focused on sharing personal stories with lots of interactive lessons, reflective writing, and small group work. They seemed at ease in the classroom and had a natural rapport with each other and with their students. They worked like a team that had been co-teaching for a long time, not like a new pair. Since the focus of this study is on the relationship between Julia and Eric, I used my observations to gain a better understanding of how they communicated in the classroom and of their overall teaching style and approach. I observed four one-hour class sessions, and below I present each session as a separate narrative. What follows are detailed descriptions of the class sessions with Julia and Eric that exemplify their approach to teaching as “cartographers.”

**Session one with Julia and Eric.** My first observation of Julia and Eric co-teaching was on a unseasonably chilly October morning. It was an early class on a Friday, so when I arrived to the classroom for the first time, I was surprised to find many of the students already present and working on their computers or iPads—though many of them did look rather disheveled and tired. They did not even look up or seem alarmed by the presence of a stranger when I walked in, and I went to the back of the room to set up for my observation. The classroom was stark white, with tables and chairs in a square “U” shape and two additional short rows of tables and chairs in the middle. There was a screen at the front of the classroom and a large instructor station with a computer to the right of the screen. One side of the room had windows with old blinds that were mostly closed. Julia and Eric both arrived a minute before class started, looking a bit tired and carrying travel mugs with coffee. Eric welcomed the students and told them that they would be spending the first 15 minutes taking a quiz. While the students took the quiz, Eric set up the computer and materials for the day’s activities, and Julia took attendance on an iPad. Some students arrived late, and Julia went over to them to tell them about the quiz.

After the quiz, Eric began class by going over the assignment that was due. To get ready for the final, culminating essay, students needed to create an outline for their essay. He detailed the main points of an essay and how they needed to support their points with examples. He told a personal story of when he was an undergraduate student writing his senior thesis and found it difficult to organize. Therefore, he wanted to show them an example essay and outline. For each key point, he recommended that they have at least

three points to support it. For support, students could include information from the plenary talks, readings, and their personal experience. A student asked if they needed to include all the evidence in their outline that they would include in their final culminating essay. He answered, “No, not yet, but give me as much as you can. I want to see where you are going with your essay.” Several students had additional questions about how to start their outline, so Eric showed another example outline and paper. “The biggest thing at this time is to get your thoughts down on paper. Throw spaghetti at the wall and see what sticks!” He noted that they were not looking at word counts right now but wanted to see substantial, connecting ideas in the outline.

Julia then took over and said that they were going to first do a short writing exercise. To help students reflect on the plenary presentation from the previous week, she asked students to write down their thoughts on the following questions:

- What was the most surprising or troubling thing you learned?
- What questions were raised?
- What did the circle activity teach you about yourself and our class?
- How does the activity relate to being in community?
- How do these events tie in with our readings and our class in general?

As the students were writing, Julia and Eric floated around the classroom to see if any students needed assistance. After about 15 minutes of writing time, Julia said, “It’s lovely to see everyone writing, but let’s wrap up so we can move to discussing the reading for today.” Julia asked the students to count off by four and then to get into small groups. The students were then asked to discuss the first couple of chapters they read of *Citizen:*

*An American Lyric* by Claudia Rankine. In particular, they responded to two prompts: What struck you most about this reading and why? How is it unique compared to the other texts? Julia asked that each student share one or two observations with their group. The students actively talked and shared with each other, and Julia and Eric spent time with each of the groups hearing their thoughts.

After a few minutes of discussion Eric took over and asked the students to choose a spokesperson for their group to give a summary of their main points. The first group noted that it was important to not put labels on people you do not know and that they found the book hard to understand because it was written as poetry. Eric nodded emphatically while the students shared. He then told them how he had also found the book difficult to understand when he first read it. The second group talked about how race is relative and how there are many things people do not know about someone. The spokesperson for group three was very insistent that “subtle racism still exists today.” They also noted that they thought propaganda played a role in continuing racism. The final group admitted that they had not done the reading, so instead they had talked about their reflective writing prompt concerning the plenary presentation. Julia jumped in and asked them to save those thoughts for later. Eric summed up the group responses by sharing how he had recently read an article on how their local, small, rural town was advertised as a “white town safe for families with kids” in the 1950s and that it was “really important for everyone to understand how racism might be embedded in existing societal structures.” Julia then said she wanted to spend the last part of class debriefing on the diversity circle activity from last week since she understood that “you have lots of

feelings that you need to process.” At this point, I left the room in order to maintain confidentiality and a safe space for students for this sensitive conversation.

**Session two with Julia and Eric.** After the weekend, I made my second observation on the following Monday. The class started very similarly—several students were already working when I arrived, and Julia and Eric stepped in right before class was about to start, with coffee in hand. Julia asked the class to count off to form groups and discuss their ideas for their Story Corps essay. Before the students began their discussion, Eric went over the details of the Story Corps assignment, which involved having students write a structured story about a past event in their life that significantly shaped who they were in the present. They would be required to write a personal essay and then share the story orally in class. Eric gave some tips for the assignment: “The story must be true. Research can be close to home, so try to think about how our class readings may be useful for your story. Start in the action; get people excited to hear your story.” One student expressed concern: “I’m only 18. Nothing interesting has happened to me.” Eric told them not to worry if they had not had a significant life event, saying, “We will show you examples, and you can share ideas with your group.” Julia added, “Remember the plenary where the two students shared their stories on personal events. You have more life experience than you think you do!”

Julia then urged the students to get into their groups, “Get close so you can talk!” After the students spent considerable time talking, Eric asked each student to share some aspect of the experience they were thinking of writing about for their essay, to the extent they felt comfortable. The students very candidly and sometimes nervously shared a

range of experiences from serious sports injuries to the death of a grandparent to moving to the US from another country to having a sibling in prison. I found most of their experiences to be very difficult to hear, and I was surprised that they shared so freely. Even a couple of students who thought they had “nothing significant to share” talked about racial incidents growing up or even the difficulties in learning to play a musical instrument as someone with autism. After the students finished sharing, Julia reminded them that the first draft of their story was due the following Monday. Eric chimed in to remind the students to bring a print copy of their story to share for feedback because “there is nothing more obnoxious to an instructor than when you can’t participate.”

Julia indicated that they would be moving on to the next activity and asked students to gather in a circle in the middle of the room and to move the tables and chairs against the walls to make more space. “Get a writing utensil and your copy of the book,” she said while handing out slips of paper to each student. Each slip of paper had a page number on it and the students were instructed to go to that page of the book (*Citizen*) and to write down a quote that stood out to them and any questions they had about the content on the page. The students took three minutes to review their assigned page and write down a quote and some questions. Students whispered to each other as they looked over the book. A few students did not have their book with them so they shared with a classmate. Since they were standing in a circle, students leaned on tables or used the backs of their classmates to write down their thoughts. Julia walked around checking on the students, “When you are ready to share, come back to the circle.” The students eventually came back to the circle, and Eric emphasized that because poetry could

sometimes be hard to understand, they were going to find a partner to share their ideas. Julia told them to “find a friend, preferably someone you don’t usually talk to,” and they began sharing their quotes from their page and the questions they had written. After a few minutes, Eric asked them to swap cards with their partner and then to find a new partner to talk with. The goal was to see how well they listened in order to represent the other person’s thoughts to their new partner. Many students squinted and tried to figure out how to read their friend’s handwriting. One student exclaimed, “I have no clue what this means!” Eric used his iPhone to keep track of time, and Julia interacted with the students who had questions about the process. After they had shared with their new partner, Eric asked them to switch cards again: “Follow the same process. Try to explain what the other person wrote.” The students finished sharing and Eric asked them to all come back to the circle to share what they learned.

Back in the circle, Julia asked them how they were liking the book now that they were farther into it. One student said she really enjoyed the book and “finished the whole thing at my hair appointment.” Another student shook his head in disagreement and said he hoped that “you will share what this book is supposed to mean.” Julia asked them to state one word about their impression of the book. Some responses from the students included weird, complex, confusing, powerful, obscure, immersive, unique, challenging, honest, unpredictable, and odd. Eric shared that when he first read the book, he was only able to get part way through it before stopping, but “now that I have had time to think about it some more, it has become my favorite book.” Julia added that the book might be hard to understand at first because the poetry switches between first-person, second-



person, and third-person perspectives but that it was a powerful writing style. She reminded the students to try to finish the book and then asked for help putting the room back together if they did not have class right away.

**Session three with Julia and Eric.** My third observation with Julia and Eric took place in early November. Julia started class by noting that the “Christmas season seems to have already begun.” She indicated that since the students did not have a journal or a quiz due, they were going to spend time reflecting on their last plenary talk. “Write down three things you learned from the plenary. Try to connect to the reading and also write down any comments or questions” she explained. Most of the students did their writing on an iPad or laptop, but a few students wrote down the answers by hand. As the students wrote, Julia passed around a large plastic bag of candy left over from Halloween, saying, “I didn’t get to see you for the holiday!” The students finished writing, and Julia asked them to share with a couple of their neighbors. Some students arrived late, and Julia worked with them to find a group. Julia and Eric gathered around the instructor computer and whispered to each other while the students discussed their ideas.

After the students completed the activity, Julia asked them to share what they generally thought about the new book they were reading, *Monique and the Mango Rains: Two Years with a Midwife in Mali* by Kris Holloway. One student expressed that she was a bit disturbed by the graphic details of childbirth. Another student said that he had not thought about “rich people living in Africa.” Julia nodded and discussed the contrasting perceptions between US views of Africa and the reality: “There are large differences in how populations live around the world, just like here.” Eric pointed to a picture of a mud

hut that was in the book and another one of a very modern house to illustrate Julia's point. Julia noted that it was important that the students understand that the book was trying to represent the religious multiplicity and unique blends of spirituality present in the communities.

After further discussion about the book, Julia told the students that they were going to do another quote activity on this new book. Students took a piece of paper that had a page number and picked a quote from that page. Then then wrote a couple of sentences about why the quote was meaningful to them. Without being asked, the students removed the tables and chairs from the middle of the room and pushed the other tables against the wall to form a circle. They then began looking through their book and writing notes on their sheet of paper. Julia and Eric talked about some logistics while the students worked, and after about 10 minutes Julia asked the students to start wrapping up what they were writing. "There's another person in the room who also has the same page number as you. Find them and compare which quote you picked and why," she explained. A few students had trouble finding their matching partner, but eventually everyone settled into a lively discussion of the quotes they had chosen. One pair found that they had chosen parts of the same quote. "My quote started it and hers ended it!" one student cheerfully shared aloud. Another student left his partner to excitedly come over to tell Julia a revelation: "They know more about our culture than we know about theirs!" Julia instructed the students to exchange papers with another group and then find another quote for their new page number. The students seemed a little confused about what to do and Julia clarified the instructions. "Wrap up your discussions and then form a nice neat

circle,” she told them. She then asked them each to share one main thought that they had learned from the quotes. The students shared a variety of lessons, from the diversity of African culture to the lack of supplies for menstruation to women’s roles in cultures. Julia nodded to each comment and brought up the importance of cross-cultural communication. Eric had booted up the computer and brought up the syllabus with assignment details. Julia showed the students the due dates for their personal essay and culminating essay, saying, “Remember you don’t need to save the world. Just reflect on your own story and make sure to bring a draft to our next class.”

**Session four with Julia and Eric.** The weather took a sudden turn over the weekend, and an early November snow blanketed the campus as I arrived for my final teaching observation with Julia and Eric. It was an early snow, and many of the students seemed unprepared, wearing only thin jackets when they arrived for class that morning. As the students arrived, Eric reminded them that they had a quiz, and many quickly settled into their chairs and began working on their iPads and laptops. Julia arrived to class a couple minutes after Eric and began opening the blinds. “We need some sun!” she said. Eric took attendance, and Julia wrote some directions on the whiteboard while the students finished their quiz. A few students finished the quiz early and started talking in low whispers about the unexpected snowfall. Julia and Eric touched base about plans for class that day and looked over the attendance on the iPad as they were still missing a few students. After conferring with each, Julia started class with an icebreaker activity. “Name one good thing that happened this weekend and one thing that wasn’t so great,” she instructed. The students eagerly shared their highs: friends and parents visiting, a

baby shower, going shopping, attending concerts, visiting their hometown for the weekend. Lows mostly focused on the bad weather and homework, but a few students indicated that they had been sick, and one student had encountered serious car issues.

After the introductions, Julia asked the students to participate in a short writing activity: “This week you read chapters 3–5. Please write down three main points with illustrating quotes. Spend five minutes writing down your ideas, and then you will get into groups to discuss.” A few students got out their books to look up quotes from chapters 3–5, but one or two students moaned loudly and slumped in their chairs. Eric went over to them and gently coaxed them into getting out their books and looking over the questions. While the students were writing, Julia left the room and returned with large easel paper sheets and markers. She then wrote the numbers 1 and 2 on areas of the whiteboard and marked off two spaces. Sheets of easel paper marked with 3, 4, and 5 were also put up around the room. Julia then inquired to the class, “Do you need another minute to wrap up?” Students responded in the affirmative, so she gave them a little more time.

Julia then started the activity, “Count off in fives, and then meet in groups,” pointing to where groups should meet in the room. She asked the students to share what they wrote for their three main points and then write their answers on the large paper for their group. A few students shared that they did not finish the readings, and Eric went over to talk with them. A low din of conversation filled the room as students went chapter by chapter and discussed what happened. After about 20 minutes, several groups stopped talking, became quiet, and started flipping through their books. Julia and Eric, who were

talking together at the front of the classroom, noticed the change in the classroom atmosphere and walked over to those groups to see how they were doing. The students seemed to be done with conversation, so Julia encouraged them to write their thoughts on their easel paper or whiteboard space, saying, “One person should be the scribe and the other members of the group should report out to class. Write on the whiteboard or easel paper your main points for each chapter.” The students reluctantly got up and walked to their section and began writing their main points. Julia noted, “There are more markers up front if anyone wants a different color.” This perked up the students, and several rushed to the front of the room to select their favorite color. Julia and Eric drank their coffee and watched the students write out their notes while they answered occasional questions. Eric interrupted the students working to remind them, “One more minute before we go around and share our thoughts.”

One by one, each group shared its main points. The students talked about what happened and mentioned specific facts, but they had trouble with general themes. Julia interjected, “Don’t worry about overlap when you are discussing your points. We are looking for main themes.” One student noted that she had trouble with pronouncing the names of the characters in the book. Eric nodded and mentioned that he listened to the audio book to figure out how to pronounce the names. Another student talked about how she found that book challenging to read because of how women were treated as inferior to men. Several of the female students in class bobbed their heads up and down in shared disgust. The final group noted that they only had discussed main themes instead of specific details, and they seemed quite proud of themselves for understanding the idea of

themes. They noted that they felt that tradition was a big theme and also that the traditions around death can be happy instead of sad celebrations. “Excellent!” Julia said. “That’s a good theme to end on. Please go back to your seats, and we will wrap up.” As the students moved back to their original seats she summed up what she wanted the students to take away from the lesson:

We want you to pick up on the broader ideas. As an outsider, you want to be thoughtful and sensitive about a culture. At what point can you decide that something is not right as an outsider? One thing we want to caution you on. . . sometimes we think in a dichotomy, put down one culture and raise up another. Cultures are complex, and no culture is perfect. Any comments on how the narrator is navigating these issues?

One student raised her hand with enthusiasm and said, “The narrator shows herself as trustworthy. She wants to look at a culture and not judge it, but she is struggling with issues and not wanting to say anything.” Julia smiled at her and said, “Excellent. Any other comments about that?” No students made any comments, so she wrapped up class. “I know we are all tired and it’s a cold snowy day, so we’ll end class and return to these themes on Wednesday.” Eric jumped in to remind the students about a few assignments:

Your culminating essay draft is due this week. Submit a draft into Moodle and have a copy available on your device for your classmates to look at. Be sure to cite sources. You may choose a style, but please be consistent. We all know about the online citation tools, but the citations are often wrong. Garbage in equals garbage out.

Eric quickly showed them the citation guide on the library homepage and the Purdue OWL site for citation examples. Julia chimed in, “We will see you on Wednesday! Can we get help erasing the board and pulling down the easel paper? Thanks!”

### **Summary**

Maps make themselves both actively and passively present in our everyday lives. They codify and inscribe our contemporary, historical, and perhaps even future realities and imaginings, and give them direction and meaning. They inform, persuade, and embody our ways of knowing and relating to the towns, cities, nations, planets, and galaxies in which we live. Even in their gaps, they give shape to our limitations—to what we do not and perhaps cannot know. Those lacunae delineate that which cannot be pinned down—all the stuff that slips through our grand plans for teaching and interacting with students (identity, culture, community).

## **Chapter 8: Discussion—Cross-Case Analysis of Themes**

The method of portraiture united the narratives of four librarian-faculty co-teaching pairs. The purpose of this study was to explore the qualities and characteristics of librarian-faculty co-teaching pairs in higher education, with particular emphasis on the role of dialogue and social structures in their relationships. The following research questions guided the study and are used to discuss the findings:

1. What are the qualities and characteristics of faculty-librarian teaching partnerships?
2. How does dialogue impact faculty-librarian teaching partnerships?
3. How do social structures impact faculty-librarian teaching partnerships?

### **Themes**

Developed through cross-case analysis, the emergent themes revealed how four pairs of co-teachers constructed their relationships. The themes that were developed for this chapter came from multiple readings of the interview transcripts, field notes from the observations, and analytical memos. Those data sources were analyzed through the lens of Walsh and Kahn's (2010) "collaborative working" model. They were then organized into three interrelated themes developed inductively from the data: dynamics of co-teaching relationships, power and authority structures, and motivations and social structures.



**Dynamics of co-teaching relationships.** The dynamics of co-teaching relationships were the main focus of this study, and through observations and interviews, I examined the interpersonal aspects of each teaching relationship: how they communicated, what they liked and disliked about each other, elements of their personalities that were similar or dissimilar, common personal and professional interests, their approaches to teaching, and so on. While each co-teaching portrait revealed the nuanced differences of each relationship, several common themes emerged across the teams: the strength of personal relationships, habits of communication, and co-mentoring and co-learning.

**Strength of personal relationships.** Much of the research literature on librarian relationships with faculty is focused on frustrations around issues of parity. The power imbalances perceived by librarians are often exacerbated by the gendered nature of librarianship and of academe, by traditional campus hierarchies and cultures that privilege research over teaching roles, and by traditional campus roles that separate scholars from service providers (e.g., librarians). Nonetheless, all four librarians found ways to negotiate the challenges associated with these relationships and felt respected and appreciated by their teaching faculty partners. In fact, a key element that made all these co-teaching partnerships so successful was the positive personal relationships between each of the pairs. Whether they had known each other for decades or had just met, each of the eight participants in this study discussed the personal characteristics (beyond professional expertise) that they not only appreciated but also enjoyed about their colleagues. They did not just have to work together; they liked working together. For

Margaret and Martina, it was a shared love of the literary arts scene and being at similar stages in their careers. Donald and Dorothy bonded over a similar sense of humor and a passion for social justice. Jane and Alice were connected in mutual passion for supporting graduate students and their shared work history. Julia and Eric benefitted from similar easy-going personalities and a strong desire to support the common good.

All of these co-teachers were committed to the act of co-teaching itself and to supporting students, and the majority said they had and would, if needed, co-teach with difficult people. Nevertheless, what made them want to put in the extra work to improve the course and to improve communications was their positive personal feelings for their colleagues. The fact that they liked each other was a significant factor in “getting them over the hump” in each quarter or semester. This is not a surprising finding; after all, co-teaching requires an immense amount of time and effort, and it is infinitely easier to work with a person one likes. What is surprising is that all four of the pairs talked about how different they were from their co-teacher, in both teaching style and personality. There needed to be one or two commonalities that made them “click,” but it was the differences that really made them appreciate the other person. These differences could also be a source of frustration from time to time. Alice thought Jane was too chatty in class, and Jane thought Alice needed to be more flexible with her schedule. Dorothy was sometimes annoyed that Donald often wanted his class “to pop into the archives unannounced,” while Donald thought Dorothy should be more open to assignments that allowed “unencumbered exploration.” At the same time, they were also affectionately amused by these differences. Julia liked that Eric was “quirky,” and Eric had fun encouraging his

“night owl co-worker” Julia during their early morning classes. Martina enjoyed that Margaret spent “too much time chatting” with students before and after class, and Margaret poked fun at Martina needing to learn to “go with the flow” of a class.

This personal relationship dynamic was also evident to many of the students. Julia indicated that she thought students could sense if co-teachers got along or not, and the fact that they worked well together made the students feel safe. Jane and Alice sometimes had disagreements during class over little things, and the students often smiled. During one such exchange over confusion on a due date, a student purposely turned around and said to me, “It’s so nice that they are friends.” Donald and Dorothy also had a personal dynamic in the classroom that was noted by students. Donald would occasionally make a sarcastic remark on the side to Dorothy, and she would laugh. After Donald made a joke about a certain archival photograph that they had been using for many years, one student turned to Dorothy and said, “You understand his joke, don’t you?” This type of back and forth communication in the classroom can sometimes backfire for co-teachers if they are not careful, but the three co-teaching pairs who were regularly in the classroom together made it work well because of their strong relationships.

**Habits of communication.** Clear and open communication was described as crucial to success by the four teaching pairs, particularly as partners were establishing their initial co-teaching arrangements. Participants discussed their teaching philosophies, goals for the class, and teaching approaches. Through these discussions, they assessed their compatibility. Participants also indicated that recognizing the different strengths and areas of expertise of one’s partner was important in course

planning, and some appreciated the opportunity to focus more on their own areas of expertise while their partners picked up the rest. Previous research supports the importance of planning and partner compatibility in successful co-teaching relationships (Scruggs, Mastropieri, & McDuffie, 2007), but it also suggests that co-teachers tend to exaggerate the importance of disciplinary expertise in ensuring a positive student experience (Jones & Harris, 2012). Communication between co-teaching partners was affected by interactions both in and out of the classroom. These pairs had successful co-teaching partnerships as well as relationships that extended beyond the classroom; they were often involved in research together and were sometimes friends beyond work.

**Co-mentoring and co-learning.** All of the participants described co-teaching as helping them to grow as instructors, providing them opportunities to reflect on and discuss ideas, perspectives, and approaches that a solo teaching assignment might not offer. Co-teaching helped shape their pedagogical approaches through mentoring or co-learning, supporting the notion in existing literature that co-teaching offers benefits not only to students but also to those involved in the co-teaching relationship (Bettencourt & Weldon, 2010).

Co-mentoring was prevalent even when partners were at different places in their careers, and that mentoring extended beyond the classroom. Julia described how teaching with Eric helped her learn the culture of the college. Alice discussed how working with Jane had given her confidence and new teaching skills. Donald shared how Dorothy's passion for primary source instruction had helped him develop creative and innovative approaches to the writing curriculum. Margaret reflected on how much she had learned

about library research from working with Martina. All the participants described engaging in a co-learning process, whereby both faculty members grew commensurately as teachers and researchers.

In fact, all four pairs described the co-learning process as one of their primary motivations for engaging in co-teaching. All participants expressed happiness with their co-teaching experience, and some said that they preferred co-teaching over teaching alone. There is no shortage of literature corroborating the benefits of co-teaching for teacher development (Nevin, Thousand, & Villa, 2009; Shibley, 2006).

### **Power and Authority**

For all four teaching dyads, the beginning of their co-teaching experience involved internal questions of power. They sometimes struggled with identifying who had power within and responsibility for the course as well as how that power would be shared. In addition, all of the librarians referred to “power” in their co-teaching relationship as if it was a singular entity, seemingly something one professor might have while the other did not, something to be gotten or received as a medal. The teaching faculty in the study referred to power in terms of an obligation or a responsibility. Either way, both librarians and professors had a sincere desire to put forth their best effort to enable students’ success and found that co-teaching gave them that opportunity. The power dynamics in each relationship had both positive and negative aspects that changed dynamically depending on the relationship between the teaching partners and the type of collaborative work they were engaged in. In many ways, these power dynamics served as a creative force that propelled the dyads to communicate about misunderstandings and to

develop creative solutions for teaching. The sub-themes of course ownership and grading and curriculum as collaboration are described in more detail below.

**Course ownership and grading.** Course ownership refers to the instructor who controls important decisions in the course, such as course objectives, pedagogy, or grading. In all four pairs, the faculty member owned the course, while the librarian co-teaching partners contributed significantly to various areas of course design, teaching, and sometimes grading. To a large extent “ownership” of the course was defined by who was listed as the instructor of record. For two of the pairs (Jane and Alice; Donald and Dorothy), the librarians were not paid as adjuncts but were embedded into the course as part of their regular job duties through arrangements with their department chairs and supervisors. This arrangement gave them a great degree of flexibility in defining their co-teaching roles, but it also meant that the librarians never felt that it was truly their course. For the other two pairs (Margaret and Martina; Julia and Eric), the curriculum clearly defined their roles in the course. This clarity gave them a sense of ownership of the course but also hindered their full involvement in all aspects of course design.

Within the context of course ownership, grading often caused friction for the pairs. All four pairs had different grading practices, and none of the pairs were completely happy with their current arrangements. For Margaret and Martina, the grading was clearly divided along pre-defined structures. Margaret graded the majority of the students’ work, while Martina graded only the assignments that were part of her class. This setup allowed for clearly defined roles but caused both of them some anxiety. Margaret worried that Martina might not know the students well enough to grade them,

and Martina worried that her feedback on the students' research could not be fully considered for their final writing assignments (which incorporated previous work that she had graded). For the second pair (Donald and Dorothy), Donald was the instructor of record and felt that confidentiality policies did not allow him to share grading responsibilities with other instructors. Dorothy was fine with this arrangement though she did wonder whether the fact that she did not grade student assignments influenced whether students saw her as an equal partner in the class. Julia and Eric had a similar structure in that Julia did all the grading, but they indicated that it did cause some confusion for the students since the course content was taught by both instructors. Finally, Jane and Alice co-graded all assignments (an uncommon practice in co-teaching pairs), and while they had tried to delineate different practices around grading, it remained a significant source of tension in their relationship.

The interviews with all four pairs revealed a few sub-themes regarding why grading was the source of some uncertainty and tension for all the pairs. Two of the librarians (Dorothy and Eric) expressed unease about participating in the grading process, not because they did not know how to grade (they had both taught as adjuncts and had graded students for other courses) but because they did not feel it was their place to grade for the class. In both cases, the faculty members felt it was their responsibility to grade and had clearly communicated this preference to their partners. This preference on the part of the faculty members (Donald and Julia) seemed to be the result of several factors: They did not feel the librarians were being compensated enough for their co-teaching and therefore did not want to burden them with the extra responsibility. Donald also had some

concerns about student privacy since Dorothy was embedded in the course as the archivist but was not officially an instructor of record. Dorothy and Eric did not argue with their co-teachers about the grading structure as a matter of respect for their colleagues' authority, and they did not want to damage their partnership by insisting on participation in grading.

For the other two pairs, the grading structure was particularly cited as an issue in the relationship. As previously mentioned, Margaret and Martina divided up grading by the types of assignments, but because of the defined curricular structure, neither had much influence in how the other person graded. Since the assignments were connected, this odd grading structure made both of them nervous, but they also did not want to “rock the boat” or “invade someone else’s turf.” Jane and Alice completely shared the grading of all assignments, and unlike the other pairs, they were both in agreement that grading should be done collectively. Nevertheless, they often had disagreements about expectations for certain grades and the timeline for when grading should be done. Much of the research literature shows that grading is a source of anxiety and frustration for most faculty, but faculty also view it as one of the main responsibilities of teaching college courses. For this study, the teaching faculty largely did not want to give up the authority of grading, and the librarians were often unsure of what their role should be in the process.

**Curriculum as collaboration.** While struggles over course ownership and grading influenced power dynamics within the co-teaching relationships, for all the pairs in this study, curriculum served as the main vehicle of their collaboration and was the



central area where power dynamics seemed to even out (and in some cases were nonexistent). While all the pairs had conversations about teaching practices, they were far more engaged with each other regarding how they were going to structure their assignments, what concepts should be taught, and what resources could be employed to best teach those concepts. The ability to understand a partner's professional expertise and practice was perceived by librarians and faculty members as an important factor in co-designing curriculum, but a lack of this understanding was not perceived as a barrier to co-teaching collaboration. In fact, all four pairs believed that working together on the curriculum of a course was a continual learning process and that the collaboration was only strengthened when partners become increasingly familiar with each other's worldview and expertise over time. The desire to co-design curriculum was seen as far more important than detailed knowledge of their colleague's field.

Margaret and Martina and Julia and Eric were working within pre-defined curricular structures, which actually caused some frustrations for them. They wanted to have the opportunity to make adjustments to the curriculum and frequently had conversations about how they might improve the curriculum within the structures that were already in place. Finally, all of the librarians in the study cited the opportunity to design curriculum as one the joys of their participation in co-teaching. Academic reference librarians primarily teach "one-shot" sessions and therefore only have the opportunity to design short workshops and not full credit courses. All the librarians spoke at length about how much they had learned in their co-teaching relationships about course

design and student assessment and how they enjoyed the creative aspects of curricular collaboration.

*Collaboration* is purposeful and intentional learning as a professional practice (Creamer & Lattuca, 2005). Creamer and Lattuca (2005) defined *interdisciplinarity* as different types of interactions and collaborative learning activities between two or more different disciplines. Proponents of collaboration and interdisciplinarity suggest that potential learning benefits of these partnerships outweigh any risks or barriers involved (Creamer & Lattuca, 2005; Holley, 2009; Kezar, 2005, 2006; Kezar & Lester, 2009; Walsh & Kahn, 2010). Regardless of their overall approaches to co-teaching, all participants emphasized that the design of the course should be a collaborative effort. This collaborative approach helped partners reconcile diverse perspectives, strengths, and expertise in planning course goals and content. It also addressed scheduling conflicts to promote continuity.

### **Motivations and Social Structures**

Co-teaching requires extensive time and effort, and while the responsibilities may be shared, the level of communication and collaboration needed means that co-teachers must be committed to the process in order to be successful. Within this context, the motivations for participating in co-teaching were a recurrent theme in interviews and observations, particularly in terms of how these motivations were influenced by social structures, such as supervisor and colleague expectations, institutional policies around course load, and faculty roles and responsibilities. Two sub-themes emerged: 1) students as the main motivation and 2) time and effort.

**Students as the motivation.** Overall, participants perceived that co-teaching provided a desirable educational experience for students, providing a more in-depth exploration of content knowledge. Participants felt they were often able to develop a better course through their combined teaching experiences with partners of differing expertise and perspectives. They were able to explain topics differently and interact more with students, benefitting student learning. In fact, all four pairs in the study were motivated to be part of a co-teaching team in order to improve the learning experience for students, and this dedication to student learning helped them to continue co-teaching despite social structures that hindered teaching and relationship difficulties. Three of the faculty members (Margaret, Donald, and Jane) were also motivated by beliefs that writing and research could be improved by working with librarians. Julia was participating in co-teaching a core class with a librarian as part of a larger university structure, but she was still motivated by the desire to connect with first-year students and improve their sense of community and identity. For the librarians, while there were a variety of different curricular structures and stipend options that they participated in, all the librarians wanted to co-teach in order to work with students, and they were all doing so voluntarily (e.g., it was not a regular part of any of their job duties). While the various pairs had different past experiences working with others, those experiences positively influenced their views about co-teaching with their current partners, as they all recognized the importance of having a strong motivation to be part of a co-teaching experience. The different dyads realized that collaboration to benefit students was a shared choice and responsibility and something that they had all agreed to do.

Kezar (2006) argued that some organizations are reorganized or redesigned to remove barriers to collaboration for those who have the desire to work together, whereas other organizations are made for collaboration by their very mission and values. This mission-based orientation creates a culture in which collaboration is the norm and in which colleagues are encouraged and expected to collaborate. All four pairs indicated that collaboration was a core value of their university and department, and while Jane experienced some resistance to the purpose of her course, she did not perceive any obstacles to co-teaching itself. The most vivid example of an organizational culture supporting co-teaching was Julia and Eric, who worked for a small, religious liberal arts college where interdisciplinary co-teaching was a requirement for first-year experience courses. Overall, each of the participants in the study stressed that the ability and desire to collaborate and to embrace interdisciplinarity was supported by their colleagues and direct supervisors and that they felt encouraged in their desire to co-teach. Interestingly, none of the participants felt that their campus culture was a significant motivator for participating in co-teaching though. They were all doing so of their own accord, and while they were glad to have the support of their institutions, broadly speaking, they were all committed to making co-teaching work within whatever structures might be in place.

Grassian and Kaplowitz (2005, p. 50) argued that information literacy instruction is a shared responsibility, and “the more IL [information literacy] librarians know about what faculty do, what they value, and how they view IL, the better they can form collaborative coalitions.” The premise of interprofessional collaboration is that members of different professions need to work together to achieve desired outcomes in the best

interest of the collaborators and of those who are served by the collaboration (e.g., students). Interprofessional collaboration is more likely to succeed when collaborators understand the professional values, practices, and knowledge base of their partners. In the context of information literacy and collaboration, this recommendation does not mean that a librarian has to have in-depth knowledge of a faculty member's discipline or field of study or that a faculty member has to be an expert in librarianship. It does mean, however, that each member of the collaborative project must recognize the value of each professional's knowledge and expertise to the success of the collaboration and understand what they value in their professional practice and why.

In the context of this study, three of the four pairs were motivated to co-teach in order to create a classroom environment in which students could best learn research and writing skills. Whether they referred specifically to information literacy as a concept or not, all the pairs talked about the importance of teaching students critical thinking skills and research practices. Three of the faculty members in the study saw librarians as being experts in this area and had purposely sought a co-teaching partnership with them in order to improve their teaching of those skills. Julia and Eric were not teaching a research-focused class, but Julia still noted how she thought Eric was particularly skilled at leading discussions around research and writing and critical thinking.

An unexpected finding of this study was that faculty and librarians identified their co-teaching collaboration itself as a student learning outcome. Faculty members and librarians indicated that when students witness faculty-librarian collaboration in the classroom, they learn that faculty and librarians believe student learning is important

enough to invest their time in working together to enhance student learning. Participants in this study also noted how their collaborative work demonstrated to students concepts of interdisciplinarity in action (e.g., students could see two professionals from different fields having a conversation).

**Time and effort.** Participants outlined a few of co-teaching's disadvantages, which impacted their motivation; all the comments revolved around the time and effort necessary to co-teach. All the librarians in the study discussed how it was difficult to balance the intensity of co-teaching demands with their regular job duties. Faculty also relayed that they were only receiving their same course load credit and that it did not reflect the amount of time needed to co-teach well. While some co-teaching pairs encountered challenges around personality conflicts or disagreements over grading, they all agreed that these obstacles could be overcome with a commitment to creating the best class for students. In fact, it should be noted that all the faculty members and librarians in the study indicated that the amount of time they invested in co-teaching a class was far beyond their usual duties but that they were more than willing to do the extra work.

### **Summary of Findings**

Compatibility with one's co-teaching partner to maintain a strong communicative relationship throughout the experience was the central factor in defining librarian-faculty teaching partnerships in this study (Quinlan, 1998). While building a co-teaching model around a specific relationship can create issues of long-term sustainability for a course, extensive time and effort is needed to foster a successful co-taught class within the

confines of higher education structures, and this level of commitment cannot be maintained if relationship issues exacerbate workload demands.

Academic hierarchies and associated social structures did play a role in determining the dynamics of co-teaching relationships, particularly as they related to grading and overall ownership of a course. Faculty members in each relationship were more likely to maintain ownership of a course and have greater autonomy in directing the course's execution. The lack of defined course loads for librarians was seen as a significant factor inhibiting parity in the relationship, but the lack of a defined course load also allowed greater flexibility in the relationship. As a result, many of the faculty found collaboration with librarians to be “structurally” easier for this reason.

Finally, both librarians and faculty in this study were motivated to enter into a co-teaching relationship and continue co-teaching despite time constraints and other frustrations because of their strong belief that it greatly benefited students. While many studies of librarian-faculty partnerships focus on understanding information literacy, this study shows that librarian-faculty teaching partnerships are built on compatible relationships, shared curricular goals, and a passion for working with students.

Knowledge is complex in our “networked society.” In response, Walsh and Kahn (2010) suggest that the academy—always built on dialogue and other collaborative enterprises—must become more reflective of other social enterprises. Within this interdisciplinary environment, co-teaching holds the promise of helping both faculty and students better understand diverse perspectives. As professionals who work regularly with both students and faculty and who have a nuanced understanding of disciplinary

differences in research and writing, librarians are well positioned to be actively involved in co-teaching practices. As seen in this study, the themes that shape co-teaching relationships are dynamic and iterative. They overlap and bump up against each other, causing both positive and negative outcomes. The challenges, and ultimately the benefits, of co-teaching lie in these tensions that shift and morph throughout a quarter and semester, influenced by the dynamics of the classroom environment and the larger institutional context. The themes do not, and cannot, provide a roadmap for best practices in co-teaching between librarians and faculty, but by providing insights into the dynamics of these co-teaching relationships, this study can assist higher education leaders in constructing a supportive environment that facilitates effective co-teaching practices.



## **Chapter 9: Discussion and Recommendations for Practice**

While not exhaustive, the findings of this study suggest implications for librarian and faculty teaching collaboration and collegiate co-teaching practices more generally. The four main recommendations, as supported by the themes, are discussed below.

### **Create Defined Course Loads for Librarians**

The ACRL asserts that librarians should have faculty status because of how they contribute to the academic discourse in information science and library practice. The American Association of University Professors (AAUP) proclaimed its support of this assertion because librarians are scholars who produce research in their fields and because they also teach, both of which are requirements for faculty members (Witek, 2014). The role of the librarian as a scholar and as an instructor is crucial to the success of students in postsecondary coursework. Leaders in higher education could begin to explore the benefits of expanding library faculty member positions, where the sole responsibility of the faculty librarian would be to build co-teaching relationships with content-specific faculty members. All the librarians in the study indicated that their current co-teaching models would be unsustainable if they were paired with more than one faculty member at a time given their current job demands. While some universities run information literacy credit courses taught by librarians, faculty librarians do not have defined course loads as teaching is typically only a small portion of their job. Defined teaching loads for academic librarians in certain position might also be a way to mitigate the burdens of co-

teaching for librarians and result in improved relationship parity. Course loads are the currency by which teaching is measured and valued in higher education, and librarians' participation in this enterprise is ultimately hampered by having a faculty status that is very different from their peers.

### **Incentivize Co-Teaching Practices**

Creating a faculty librarian focused only on teaching credit courses might be one way to foster co-teaching practices, but it would be a moot effort without a mutual incentive for departmental faculty to collaborate with librarians. This idea is challenging because American higher education is entrenched in the paradigm of the single-instructor classroom. Bauwens, Hourcade, and Friend (1989) acknowledge this paradigm in their initial foray into collaborative teaching in the secondary classroom, and Vermette, Jones, and Jones (2010) talk about the traditional classroom teaching model specific to higher education. The current paradigm in colleges and universities is that of the single instructor. That person stands alone at the front of the classroom. That person writes and distributes the syllabus. That person determines what course content will be delivered to students and how it will be delivered. Co-teaching challenges this image by depositing another lead individual in that space. While they do not specifically talk about co-teaching, Walsh and Kahn (2010) believe that universities must encourage collaborative work through policies and procedures in order to change the culture of higher education. Changing teaching practices in higher education will also require a cultural shift. As educators, we must recognize that co-teaching requires shared expectations, shared delivery, and a shared curriculum across disciplinary boundaries. This work will remain

limited to the select few willing to take on these extra tasks unless universities put structures in place that encourage and reward these efforts. Incentivizing co-teaching could come in the form of faculty stipends, modified course releases, and/or changes to how co-teaching is evaluated for promotion and tenure.

### **Embed Co-Teaching as an Element of Core Curriculum**

Kathryn D. Blanchard, a professor and the chair of religious studies department at Alma College, reflects on the importance of co-teaching with regard to putting more than one expert in the same room to foster student learning. She points specifically to the mission of a liberal education, an environment where students strive to authentically question the world around them, inspiring them to then investigate that inquiry and subsequently draw conclusions through synthesis and analysis (Blanchard, 2012). Blanchard (2012) then points to the objective of professors to teach this inquiry through reading, critical thinking, research, and writing. She argues that “good teaching” in college means that the students will walk away from courses with the ability to employ those skills outside of the classroom. Teaching all of these skills in one course with one professor is challenging because such a model requires professors not only to be experts in their content field but also experts in teaching the various skills to fully engage with the content (Blanchard, 2012). Core classes, such as the first-year experience class taught by Julia and Eric, offer a unique and powerful opportunity to structure core curriculum around not only shared learning outcomes but also shared classroom teaching.

While Blanchard (2012) does not specifically point to librarians as the collaborators in classrooms, we can infer that she would be in support of such

collaborations. Many librarians are information literacy and research specialists. They are trained to develop content to specifically address the student learning outcomes of the ACRL framework, like identifying appropriate source material, critically analyzing the source, and effectively using the source to support a thesis statement. If we acknowledge that co-teaching is an effective learning strategy for supporting student learning in the classroom, then it only makes sense to facilitate the co-development of core curriculum between librarians and faculty.

### **Embed Academic Librarians into Research-Focused Courses**

The nature of the teaching collaborations in this study was largely focused on research- and writing-intensive classes because of librarians' expertise. Research-focused courses offer opportunities for faculty and librarians to come together over shared interests and expertise. As detailed in the literature review, embedding academic librarians into research courses is a common practice in higher education, but the work remains limited in scope. Broader curricular changes at institutions could encourage the adoption of this practice on a wider scale. For example, stipends could be offered to librarians and faculty willing to co-teach a research course, or librarians could be paid as adjuncts to co-teach courses outside of their regular job duties.

### **Limitations**

This study has limitations related to the conceptual framework and research methodology. There is no single definition of "professional collaboration" in the scholarly literature. Critics of interprofessional collaboration are skeptical about the feasibility of members of different professions working closely together. Strong

professional identity, status differentiation, and strong adherence to professional autonomy fuel this pessimism (Hudson, 2002). Interprofessional collaboration is also subject to valid critiques for its shortcomings in theoretical, conceptual, methodological, and practical frameworks. The argument that there is limited evidence of the effectiveness and outcomes of interprofessional collaboration is also a concern. Walsh and Park-Taylor (2003) argue that published reports of the effectiveness of interprofessional collaboration in schools may actually overstate its efficacy because positive evaluation reports may be more likely to be published than negative reports. Other criticisms are that conceptual and theoretical frameworks of faculty collaboration address structural and interpersonal factors more than process, that models lack a link between collaboration and its effects, that there is less research on the contexts or environments in which collaborators work, and that assumptions about the impact of collaboration on outcomes have not been empirically tested (D'Amour et al., 2005).

The sampling and data collection methods also had limitations. The snowball sampling method used to recruit participants for this study is a limitation in that I primarily relied on librarians to recruit faculty members for the study. However, librarians are the professionals in higher education who are most actively involved in and knowledgeable about information literacy. Therefore, they were the best sources for identifying faculty participants for the study. Finally, students were not included in this study. Therefore, data about the success of a collaboration was gathered solely from the perspectives of librarians and faculty. Finally, the participants in this study were a

criterion-based sample of faculty and librarians, and they are not representative of a larger population. Rather, they are exemplars of faculty-librarian teaching collaborations.

### **Suggestions for Future Research**

Based on the findings of this study, there are several areas for future research on faculty-librarian interprofessional collaboration and information literacy in higher education. Faculty members and librarians had differing opinions about the role of the librarian in assessing student learning, especially regarding students' ability to critically evaluate and apply information to their research. Future researchers should explore the scope of the librarian's role in the assessment of information literacy and student learning. This research should include an investigation of the boundaries and limitations of all members of a faculty-librarian information literacy collaboration project.

Students were not surveyed or interviewed for this study. Previous researchers have investigated students' perceptions of information literacy (e.g., Gross & Latham, 2009; Neely, 2002), but more scholarship is needed to further explore the impact of faculty-librarian collaboration on students. To inform their investigations, researchers should look to Kezar's (2006) work on the positive impact that librarians have on student engagement. Moreover, researchers should specifically investigate the long-term outcomes of witnessing and being educated by faculty and librarian collaborators in the classroom. They should also investigate the extent to which students are aware that they are being taught information literacy skills. Faculty members and librarians in this study had different opinions on whether the term "information literacy" should be used with students in professional teaching practice. Does it matter if students are not aware that

they are learning information literacy skills? How do faculty members and librarians decide whether they will use the term “information literacy” in professional teaching practice? Is it a conscious decision? If so, what are the reasons for and consequences of the decision?

Researchers might also consider whether existing instruments that are used to study interprofessional collaboration (e.g., Thannhauser, Russell-Mayhew, & Scott, 2010) in health and social work can be adapted to study faculty-librarian interprofessional collaboration. The findings from this qualitative study revealed variables that can be measured using quantitative methods and instruments. For example, questionnaires could be used to measure opinions on using the term information literacy in professional practice or opinions on the significance of tenure and faculty status in the faculty-librarian collaborative relationship. Moreover, quantitative methods such as correlation or regression studies might also be used to examine how faculty-librarian collaboration might vary by type of appointment (e.g., tenure track), sector of higher education, or type of institution.

Finally, researchers might pursue further qualitative research on co-teaching to evaluate the applicability of these findings to other contexts. It would be useful to compare co-teaching by demographic sub-groups to investigate whether differences exist among racial groups or by gender, particularly with respect to the power and authority dynamic. In this study, I described the qualities and characteristics of co-teaching between librarians and faculty; future researchers could explore the mechanisms and relationships among the components to create a theoretical model of co-teaching.

## References

- Adams, L., & Cessna, K. (1993). Metaphors of the co-taught classroom. *Preventing School Failure: Alternative Education for Children and Youth*, 37(4), 28-31.
- American Library Association. (1989). Presidential committee on information literacy: Final report. Retrieved from <http://www.ala.org/acrl/publications/whitepapers/presidential>
- Anderson, M. S. (1996). Collaboration, the doctoral experience, and the departmental environment. *The Review of Higher Education*, 19(3), 305-326.
- Association of American Colleges and Universities. (2013). *Ensuring quality & taking high-impact practices to scale*. Washington, DC: AAC&U.
- Association of College and Research Libraries. (2000). *Information literacy competency standards for higher education*. Retrieved from <http://hdl.handle.net/11213/7668>
- Association of College and Research Libraries. (2016). Framework for information literacy for higher education. Retrieved from <http://www.ala.org/acrl/standards/ilframework>
- Austin, A. E., & Baldwin, R. G. (1992). Faculty collaboration: Enhancing the quality of scholarship and teaching. Retrieved from <https://files.eric.ed.gov/fulltext/ED346805.pdf>
- Badke, W. B. (2005). Can't get no respect: Helping faculty to understand the educational power of information literacy. *The Reference Librarian*, 43(89-90), 63-80.
- Bailey, P., Jones, L., & Way, D. (2006). Family physician/nurse practitioner: Stories of collaboration. *Journal of Advanced Nursing*, 53(4), 381-391.



- Bain, K. (2012). *What the best college teachers do*. Cambridge, MA: Harvard University Press.
- Baldwin, R. G., & Austin, A. E. (1995). Toward greater understanding of faculty research collaboration. *The Review of Higher Education*, 19(1), 45-70.
- Barnes, C. (2013). MOOCs: The challenges for academic librarians. *Australian Academic & Research Libraries*, 44(3), 163-175.
- Barr, R. B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change: The Magazine of Higher Learning*, 27(6), 12-26.
- Bauwens, J., Hourcade, J. J., & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education*, 10(2), 17-22.
- Becker, B. W. (2010). Embedded librarianship: A point-of-need service. *Behavioral & Social Sciences Librarian*, 29(3), 237-240.
- Benjamin, J. (2000). The scholarship of teaching in teams: What does it look like in practice? *Higher Education Research & Development*, 19(2), 191-204.
- Bensimon, E. M., & Neumann, A. (1992). *Redesigning collegiate leadership: Teams and teamwork in higher education*. Retrieved from <https://files.eric.ed.gov/fulltext/ED357698.pdf>
- Bettencourt, M. L., & Weldon, A. A. (2011). Team teaching: Are two better than one? *Journal on Excellence in College Teaching*, 21(4), 123-150.

- Bewick, L., & Corral, S. (2010). Developing librarians as teachers: A study of their pedagogical knowledge. *Journal of Librarianship and Information Science*, 42(2), 97-110.
- Bezetz, A. (2013). Free prize inside! Embedded librarianship and faculty collaboration at a small-sized private university. *The Reference Librarian*, 54(3), 181-219.
- Black, W. K., & Leysen, J. M. (2002). Fostering success: The socialization of entry-level librarians in ARL libraries. *Journal of Library Administration*, 36(4), 3-27.
- Blanchard, K. D. (2012). Modeling lifelong learning: Collaborative teaching across disciplinary lines. *Teaching Theology & Religion*, 15(4), 338-354.
- Blummer, B. (2009). Providing library instruction to graduate students: A review of the literature. *Public Services Quarterly*, 5(1), 15-39.
- Bourassa, D. M., & Kruger, K. (2001). The national dialogue on academic and student affairs collaboration. *New Directions for Higher Education*, 116, 9-38.
- Bowler, M., & Street, K. (2008). Investigating the efficacy of embedment: Experiments in information literacy integration. *Reference services review*, 36(4), 438-449.
- Brasley, S. S. (2008). Effective librarian and discipline faculty collaboration models for integrating information literacy into the fabric of an academic institution [Special Issue]. *New Directions for Teaching and learning*, 114, 71-88.
- Briggs, C. L. (2007). Curriculum collaboration: A key to continuous program renewal. *The Journal of Higher Education*, 78(6), 676-711.
- Brower, M. (2011). A recent history of embedded librarianship: Collaboration and partnership building with academics in learning and research environments. In C.

- Kvenild & K. Calkins (Eds.), *Embedded librarians: Moving beyond one-shot instruction* (pp. 3-16). Chicago, IL: Association of College and Research Libraries.
- Bruce, C. S. (1999). Workplace experiences of information literacy. *International Journal of Information Management*, 19(1), 33-47.
- Burke, M. (2012). Academic libraries and the credit-bearing class: A practical approach. *Communications in Information Literacy*, 5(2), 156-173.
- Chiste, K. B., Glover, A., & Westwood, G. (2000). Infiltration and entrenchment: Capturing and securing information literacy territory in academe. *The Journal of Academic Librarianship*, 26(3), 202-208.
- Christiansen, L., Stombler, M., & Thaxton, L. (2004). A report on librarian-faculty relations from a sociological perspective. *The Journal of Academic Librarianship*, 30(2), 116-121.
- Clark, B. M., & Gaughan, T. M. (1979). Socialization of Library School Students: A Framework for Analysis of a Current Problem. *Journal of Education for Librarianship*, 19(4), 283-293.
- Clyde, L. A. (2002). An instructional role for librarians: An overview and content analysis of job advertisements. *Australian Academic & Research Libraries*, 33(3), 150-167.
- Coffland, J. A., Hannemann, C., & Lee, R. (1974). Hassles and hopes in college team teaching. *Journal of Teacher Education*, 25(2), 166-169.

- Cold, S., & Urton, E. (2013). Embedded librarianship: A model for promoting sustainability on campus. *International Journal of Sustainability Education*, 8(1), 13-22.
- Collinson, V. (1999). Redefining teacher excellence. *Theory into Practice*, 38(1), 4-11.
- Conway-Turner, K. (1998). *Women's studies in transition: The pursuit of interdisciplinarity*. Newark, NJ: University of Delaware Press.
- Cook-Sather, A. (2001). Unrolling roles in techno-pedagogy: Toward new forms of collaboration in traditional college settings. *Innovative Higher Education*, 26(2), 121-139.
- Covone, N., & Lamm, M. (2010). Just be there: Campus, department, classroom... and kitchen? *Public Services Quarterly*, 6(2-3), 198-207.
- Creamer, E. G. (2003). Exploring the link between inquiry paradigm and the process of collaboration. *The Review of Higher Education*, 26(4), 447-465.
- Creamer, E. G. (2004). Collaborators' attitudes about differences of opinion. *The Journal of Higher Education*, 75(5), 556-571.
- Creamer, E. G. & Lattuca, L. R. (2005). Advancing faculty learning through interdisciplinary collaboration. *New Directions for Teaching and Learning*, 102. San Francisco: Jossey-Bass.
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Cronbach, L.J., & Suppes, P. (1969). *Research for tomorrow's schools: Disciplined inquiry for education*. Oxford, UK: Macmillan.

- D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M.-D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care*, 19(Suppl. 1), 116-131.
- Davis, J. R. (1995). *Interdisciplinary courses and team teaching: New arrangements for learning*. Phoenix, AZ: American Council on Education.
- Davis, K. D. (2007). The academic librarian as instructor: A study of teacher anxiety. *College & Undergraduate Libraries*, 14(2), 77-101.
- Davis, M. G., & Smith, C. E. (2009). Virtually embedded: Library instruction within second life. *Journal of Library & Information Services in Distance Learning*, 3(3-4), 120-137.
- DeLois, K., & Cohen, M. B. (2001). A queer idea: Using group work principles to strengthen learning in a sexual minorities seminar. *Social Work with Groups*, 23(3), 53-67.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Derakhshan, M., & Singh, D. (2011). Integration of information literacy into the curriculum: A meta-synthesis. *Library Review*, 60(3), 218-229.
- Dewey, B. I. (2005). The embedded librarian: Strategic campus collaborations. *Resource Sharing & Information Networks*, 17(1-2), 5-17.
- Dodd, L. (2007). The impact of problem-based learning on the information behavior and literacy of veterinary medicine students at University College Dublin. *The Journal of Academic Librarianship*, 33(2), 206-216.

- Doz, Y. L. (1996). The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal*, 17(Suppl. 1), 55-83.
- Dugan, M. (2008). Embedded librarians in an ag econ class: Transcending the traditional. *Journal of Agricultural & Food Information*, 9(4), 301-309.
- Eadie, T. (1990). Immodest proposals. *Library Journal*, 115(17), 42-45.
- Eddy, P. L. (2010). Partnerships and collaboration in higher education [Special Issue]. *ASHE Higher Education Report*, 36(2), 1-115.
- Edwards, M. E., & Black, E. W. (2012). Contemporary instructor-librarian collaboration: A case study of an online embedded librarian implementation. *Journal of Library & Information Services in Distance Learning*, 6(3-4), 284-311.
- Edwards, M., Kumar, S., & Ochoa, M. (2010). Assessing the value of embedded librarians in an online graduate educational technology course. *Public Services Quarterly*, 6(2-3), 271-291.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Thousand Oaks, CA: Sage.
- Eyler, J., & Giles, D. E. (1999). *Where's the learning in service-learning?* San Francisco, CA: Jossey-Bass.
- Farkas, M. G. (2008). Embedded library, embedded librarian: Strategies for providing reference services in online courseware. In S. K. Steiner & M. L. Madden (Eds.), *The desk and beyond: Next generation reference services* (pp. 53-64). Chicago, IL: Association of College and Research Libraries.

- Fonseca, A. J., & Viator, V. P. (2009). Escaping the island of lost faculty: Collaboration as a means of visibility. *Collaborative Librarianship*, 1(3), 81-90.
- Gardiner, L. F. (1994). Redesigning higher education: Producing dramatic gains in students learning. *ASHE-ERIC Higher Education Report*, 23(7). Washington, DC: George Washington University.
- Gaspar, D. B., & Wetzel, K. A. (2009). A case study in collaboration: Assessing academic librarian-faculty partnerships. *College & Research Libraries*, 70(6), 578-591.
- Geertz, C. (1974). "From the native's point of view": On the nature of anthropological understanding. *Bulletin of the American Academy of Arts and Sciences*, 28(1), 26-45.
- Gillum, S. (2010). The true benefit of faculty status for academic reference librarians. *The Reference Librarian*, 51(4), 321-328.
- Given, L. M., & Julien, H. (2005). Finding common ground: An analysis of librarians' expressed attitudes toward faculty. *The Reference Librarian*, 43(89-90), 25-38.
- Goetsch, L. A. (2008). Reinventing our work: New and emerging roles for academic librarians. *Journal of Library Administration*, 48(2), 157-172.
- Grassian, E. S. (2004). Do they really do that?: Librarians teaching outside the classroom. *Change: The Magazine of Higher Learning*, 36(3), 22-27.
- Grassian, E. S., & Kaplowitz, J. R. (2005). *Learning to lead and manage information literacy instruction. Information literacy sourcebooks*. New York: Neal-Schuman.

- Gross, M., & Latham, D. (2009). Undergraduate perceptions of information literacy: Defining, attaining, and self-assessing skills. *College & Research Libraries*, 70(4), 336-350.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Thousand Oaks, CA: Sage.
- Gubrium, J. F., & Holstein, J. A. (2001). *Handbook of interview research: Context and method*. Thousand Oaks, CA: Sage.
- Gullikson, S. (2006). Faculty perceptions of ACRL's information literacy competency standards for higher education. *The Journal of Academic Librarianship*, 32(6), 583-592.
- Hall, R. A. (2008). The "embedded" librarian in a freshman speech class: Information literacy instruction in action. *College & Research Libraries News*, 69(1), 28-30.
- Hardesty, L. L. (1995). Faculty culture and bibliographic instruction: An exploratory analysis. *Library Trends*, 44(2), 339-367.
- Harmony, S., Kumar, R., Refaei, B., & Skutar, C. (2010). Collaboration between faculty and librarians to improve students' information literacy skills. *AURCO Journal*, 16, 91-111.
- Harris, S. A., & Watson, K. J. (1997). Small group techniques: Selecting and developing activities based on stages of group development. *To Improve the Academy*, 16, 399-412.



- Hartenian, L. S., Schellenger, M., & Frederickson, P. (2001). Creation and assessment of an integrated business course: One college's experience. *Journal of Education for Business*, 76(3), 149-159.
- Haskins, M. E., Liedtka, J., & Rosenblum, J. (1998). Beyond teams: Toward an ethic of collaboration. *Organizational Dynamics*, 26(4), 34-50.
- Havelka, S. (2013). Mobile information literacy: Supporting students' research and information needs in a mobile world. *Internet Reference Services Quarterly*, 18(3-4), 189-209.
- Hawes, S. L. (2011). Playing to win: Embedded librarians in online classrooms. *Journal of Library & Information Services in Distance Learning*, 5(1-2), 56-66.
- Hernon, P. (1982). Instruction in the use of academic libraries: A preliminary study of the early years as based on selective extant materials. *The Journal of Library History (1974-1987)*, 17(1), 16-38.
- Herring, S. D., Burkhardt, R. R., & Wolfe, J. L. (2009). Reaching remote students: Athens State University's electronically embedded librarian program. *College & Research Libraries News*, 70(11), 630-633.
- Hinton, S., & Downing, J. E. (1998). *Team teaching a college core foundations course: Instructors' and students' assessments*. Retrieved from <https://files.eric.ed.gov/fulltext/ED429469.pdf>
- Hoffman, S. (2011). Embedded academic librarian experiences in online courses: Roles, faculty collaboration, and opinion. *Library Management*, 32(6/7), 444-456.

- Hoffman, S., & Ramin, L. (2010). Best practices for librarians embedded in online courses. *Public Services Quarterly*, 6(2-3), 292-305.
- Holley, C. (2009). Aging gracefully? Examining the conditions for sustaining successful collaboration in environmental law and governance. *Environmental and Planning Law Journal*, 26(6), 457-485.
- Hrycaj, P., & Russo, M. (2007). Reflections on surveys of faculty attitudes toward collaboration with librarians. *The Journal of Academic Librarianship*, 33(6), 692-696.
- Hudson, B. (2002). Interprofessionality in health and social care: The Achilles' heel of partnership? *Journal of Interprofessional Care*, 16(1), 7-17.
- Ivey, R. (2003). Information literacy: How do librarians and academics work in partnership to deliver effective learning programs? *Australian Academic & Research Libraries*, 34(2), 100-113.
- Jackson, N. (2000). Writing-up people at work: Investigations of workplace literacy. *Literacy and Numeracy Studies*, 10(1-2), 5-22.
- Jacobs, W. N. (2017). Embedded librarianship is a winning proposition. *Education Libraries*, 33(2), 3-10.
- Johnson, D. W., Johnson, R. T. & Smith, K.A. (2000). Constructive controversy. *Change*, 32, 29-37.
- Jones, F., & Harris, S. (2012). Benefits and drawbacks of using multiple instructors to teach single courses. *College Teaching*, 60(4), 132-139.

- Julien, H., & Genuis, S. K. (2011). Librarians' experiences of the teaching role: A national survey of librarians. *Library & Information Science Research*, 33(2), 103-111.
- Kanter, R. M. (1994). Collaborative advantage. *Harvard Business Review*, 72(4), 96-108.
- Kemp, J. (2006). Isn't being a librarian enough? Librarians as classroom teachers. *College & Undergraduate Libraries*, 13(3), 3-23.
- Kempcke, K. (2002). The art of war for librarians: Academic culture, curriculum reform, and wisdom from Sun Tzu. *portal: Libraries and the Academy*, 2(4), 529-551.
- Kezar, A. (2005). Redesigning for collaboration within higher education institutions: An exploration into the developmental process. *Research in Higher Education*, 46(7), 831-860.
- Kezar, A. (2006). Redesigning for collaboration in learning initiatives: An examination of four highly collaborative campuses. *The Journal of Higher Education*, 77(5), 804-838.
- Kezar, A., & Lester, J. (2009). Supporting faculty grassroots leadership. *Research in Higher Education*, 50(7), 715-740.
- Kezar, A., Hirsch, D., & Burack, C. (2002). *Understanding the role of academic and student affairs collaboration in creating a successful learning environment*. San Francisco, CA: Jossey-Bass.
- Knapp, M. S. (1998). *Paths to partnership: University and community as learners in interprofessional education*. Lanham, MD: Rowman & Littlefield.

- Knefelkamp, L. (1991). *The seamless curriculum. CIC Deans Institute: Is this good for our students?* Washington, DC: Council for Independent Colleges.
- Kochan, F. K., & Mullen, C. A. (2003). An exploratory study of collaboration in higher education from women's perspectives. *Teaching Education, 14*(2), 153-167.
- Konieczny, A. (2010). Experiences as an embedded librarian in online courses. *Medical Reference Services Quarterly, 29*(1), 47-57.
- Kotter, W. R. (1999). Bridging the great divide: Improving relations between librarians and classroom faculty. *The Journal of Academic Librarianship, 25*(4), 294-303.
- Kvenild, C., & Calkins, K. (Eds.). (2011). *Embedded librarians: Moving beyond one-shot instruction*. Chicago, IL: Association of College and Research Libraries.
- Latham, D., Julien, H., Gross, M., & Witte, S. (2016). The role of inter-professional collaboration to support science learning: An exploratory study of the perceptions and experiences of science teachers, public librarians, and school librarians. *Library & Information Science Research, 38*(3), 193-201.
- Lawrence-Lightfoot, S. (1983). *The good high school: Portraits of character and culture*. New York, NY: Basic Books.
- Lawrence-Lightfoot, S., & Davis, J. H. (1997). *The art and science of portraiture*. San Francisco, CA: Jossey-Bass.
- Leathard, A. (2003). *Interprofessional collaboration: From policy to practice in health and social care*. New York, NY: Routledge.

- Lenning, O. T., & Ebbers, L. H. (1999). *The powerful potential of learning communities: Improving education for the future*. Retrieved from <http://files.eric.ed.gov/fulltext/ED428606.pdf>
- Letterman, M. R., & Dugan, K. B. (2004). Team teaching a cross-disciplinary honors course: Preparation and development. *College Teaching*, 52(2), 76-79.
- Levine, B. (1981). Co-leadership approaches to learning group work. *Social Work with Groups*, 3(4), 35-38.
- Li, J. (2012). Serving as an educator: A southern case in embedded librarianship. *Journal of Business & Finance Librarianship*, 17(2), 133-152.
- Lindstrom, J., & Shonrock, D. D. (2006). Faculty-librarian collaboration to achieve integration of information literacy. *Reference & User Services Quarterly*, 46(1), 18-23.
- Loesch, M. F. (2017). Librarian as professor: A dynamic new role model. *Education Libraries*, 33(1), 31-37.
- Love, P. G., & Love, A. G. (1995). *Enhancing student learning: Intellectual, social, and emotional integration*. Retrieved from <https://files.eric.ed.gov/fulltext/ED400742.pdf>
- Mackey, T. P., & Jacobson, T. E. (2005). Information literacy: A collaborative endeavor. *College Teaching*, 53(4), 140-144.
- Martin, J., & Murphy, S. (2000). *Building a better bridge: Creating effective partnerships between Academic Affairs and Student Affairs*. Washington, DC: National Association of Student Personnel Administrators.

- Matava, T., Coffey, D., & Kushkowski, J. (2010). Beyond library walls: Embedding librarians in academic departments. *Public Services Quarterly*, 6(2-3), 165-173.
- Mattessich, P. W., & Monsey, B. R. (1992). Collaboration: What makes it work? A review of research literature on factors influencing successful collaboration. St. Paul, MN: Amherst H. Wilder Foundation. Retrieved from the ERIC database. (ED390758)
- McGuinness, C. (2006). What faculty think—exploring the barriers to information literacy development in undergraduate education. *The Journal of Academic Librarianship*, 32(6), 573-582.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Meulemans, Y. N., & Brown, J. (2001). Educating instruction librarians: A model for library and information science education. *Research Strategies*, 18(4), 253-264.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Mitchell, W. B., & Morton, B. (1992). On becoming faculty librarians: Acculturation problems and remedies. *College & Research Libraries*, 53(5), 379-92
- Mohrman, S. A., Cohen, S. G., & Morhman, A. M., Jr. (1995). *Designing team-based organizations: New forms for knowledge work*. San Francisco, CA: Jossey-Bass.
- Montiel-Overall, P. (2005). Toward a Model of Collaboration for Librarians and Educators. *International Journal of Learning*, 12(6), 37-54.

- Montiel-Overall, P. (2007). Research on teacher and librarian collaboration: An examination of underlying structures of models. *Library & Information Science Research*, 29(2), 277-292.
- Montiel-Overall, P. (2008). Teacher and librarian collaboration: A qualitative study. *Library & Information Science Research*, 30(2), 145-155.
- Montiel-Overall, P. (2010). Further understanding of collaboration: A case study of how it works with teachers and librarians. *School Libraries Worldwide*, 16(2), 31-54.
- Mostert, M. P. (1996). Interprofessional collaboration in schools: Benefits and barriers in practice. *Preventing School Failure*, 40(3), 135-38.
- Mounce, M. (2010). Working together: Academic librarians and faculty collaborating to improve students' information literacy skills: A literature review 2000–2009. *The Reference Librarian*, 51(4), 300-320.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Muir, G., & Heller-Ross, H. (2010). Is embedded librarianship right for your institution? *Public Services Quarterly*, 6(2-3), 92-109.
- Neely, T. Y. (2002). *Sociological and psychological aspects of information literacy in higher education*. Lanham, MD: Scarecrow Press.
- Nevin, A. I., Thousand, J. S., & Villa, R. A. (2009). Collaborative teaching for teacher educators—What does the research say? *Teaching and Teacher Education*, 25(4), 569-574.
- Nimon, M. (2002). Developing lifelong learners: Controversy and the educative role of the academic librarian. *Australian Academic & Research Libraries*, 33(1), 14-24.

- Olivares, O. (2010). The sufficiently embedded librarian: Defining and establishing productive librarian-faculty partnerships in academic libraries. *Public Services Quarterly*, 6(2-3), 140-149.
- Owusu-Ansah, E. K. (2004). Information literacy and higher education: Placing the academic library in the center of a comprehensive solution. *The Journal of Academic Librarianship*, 30(1), 3-16.
- Partello, P. (2005). Librarians in the classroom. *The Reference Librarian*, 43(89-90), 107-120.
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Peacock, J. (2001). Teaching skills for teaching librarians: Postcards from the edge of the educational paradigm. *Australian Academic & Research Libraries*, 32(1), 26-42.
- Pritchard, P. A. (2010). The embedded science librarian: Partner in curriculum design and delivery. *Journal of Library Administration*, 50(4), 373-396.
- Quinlan, K. M. (1998). Promoting faculty learning about collaborative teaching. *College Teaching*, 46(2), 43-47.
- Raspa, D., & Ward, D. (2000). *The collaborative imperative: Librarians and faculty working together in the information universe*. Chicago, IL: Association of College and Research Libraries.
- Ring, P. S., & Van de Ven, A. H. (1994). Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19(1), 90-118.



- Robinson, B., & Schaible, R. M. (1995). Collaborative teaching: Reaping the benefits. *College Teaching*, 43(2), 57-59.
- Rockman, I. F. (2004). *Integrating information literacy into the higher education curriculum: Practical models for transformation*. San Francisco, CA: Jossey-Bass.
- Roth, W. M., & Tobin, K. G. (2005). *Teaching together, learning together*. New York, NY: Peter Lang.
- Rothman, B. (1980). Study of patterns of leadership in group work field instruction. *Social Work with Groups*, 3(4), 11-17.
- Ruben, B. D. (2004). *Pursuing excellence in higher education: Eight fundamental challenges*. San Francisco, CA: Jossey-Bass.
- Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Rudasill, L. M. (2010). Beyond subject specialization: The creation of embedded librarians. *Public Services Quarterly*, 6(2-3), 83-91.
- Sachs, J. (2003). *The activist teaching profession*. Philadelphia, PA: Open University Press.
- San Martín-Rodríguez, L., Beaulieu, M.-D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care*, 19(Suppl. 1), 132-147.

- Saunders, L. (2007). Regional accreditation organizations' treatment of information literacy: Definitions, collaboration, and assessment. *The Journal of Academic Librarianship*, 33(3), 317-326.
- Schmitt, R. (2005). Systematic metaphor analysis as a method of qualitative research. *The Qualitative Report*, 10(2), 358-394.
- Schulte, S. J. (2012). Embedded academic librarianship: A review of the literature. *Evidence Based Library and Information Practice*, 7(4), 122-138.
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73(4), 392-416.
- Seidman, I. (1998). *Interviewing as qualitative research*. New York: Teachers College Press.
- Senge, P. (1990). *The fifth discipline: The art and science of the learning organization*. New York, NY: Doubleday.
- Shane, J. M. (2005). Formal and informal structures for collaboration on a campus-wide information literacy program. *Resource Sharing & Information Networks*, 17(1-2), 85-110.
- Shank, J. D., & Bell, S. (2011). Blended librarianship. *Reference & User Services Quarterly*, 51(2), 105-110.
- Shapiro, J. J., & Hughes, S. K. (1996). Information literacy as a liberal art? *Educom Review*, 31(2), 31-35.

- Sheble, L., & Wildemuth, B. (2009). Research diaries. In B. Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (pp. 211-221). Santa Barbara, CA: Libraries Unlimited.
- Shepley, S. E. (2009). Building a virtual campus: Librarians as collaborators in online course development and learning. *Journal of Library Administration*, 49(1-2), 89-95.
- Shibley, I. A. (2006). Interdisciplinary team teaching: Negotiating pedagogical differences. *College Teaching*, 54(3), 271-274.
- Shumaker, D., & Makins, A. (2012). Lessons from successful embedded librarians. *Information Outlook*, 16(3), 10-12.
- Shumaker, D., & Talley, M. (2009). *Models of embedded librarianship: Final report*. Retrieved from <http://www.sla.org/pdfs/EmbeddedLibrarianshipFinalRptRev.pdf>
- Sinclair, B. (2009). The blended librarian in the learning commons: New skills for the blended library. *College & Research Libraries News*, 70(9), 504-516.
- Skov, A., & Skærbak, H. (2003). Fighting an uphill battle: Teaching information literacy in Danish institutions of higher education. *Library Review*, 52(7), 326-332.
- Smith, B. L., & McCann, J. (2001). *Reinventing ourselves: Interdisciplinary education, collaborative learning, and experimentation in higher education*. Bolton, MA: Anker.
- Snavey, L., & Cooper, N. (1997). Competing agendas in higher education: Finding a place for information literacy. *Reference & User Services Quarterly*, 37(1), 53-62.

- Sun, H.-C., Chen, K.-N., Tseng, C., & Tsai, W.-H. (2011). Role changing for librarians in the new information technology era. *New Library World*, 112(7/8), 321-333.
- Thannhauser, J., Russell-Mayhew, S., & Scott, C. (2010). Measures of interprofessional education and collaboration. *Journal of Interprofessional Care*, 24(4), 336-349.
- Tierney, W. G., & Rhoads, R. A. (1994). *Faculty socialization as cultural process: A mirror of institutional commitment*. San Francisco, CA: Jossey-Bass.
- Travis, T. A. (2008). Librarians as agents of change: Working with curriculum committees using change agency theory. *New directions for teaching and learning*, 114, 17-33.
- Tumbleson, B. E., & Burke, J. J. (2010a). When life hands you lemons: Overcoming obstacles to expand services in an embedded librarian program. *Journal of Library Administration*, 50(7-8), 972-988.
- Tumbleson, B. E., & Burke, J. J. (2010b). Embedded librarianship is job one: Building on instructional synergies. *Public Services Quarterly*, 6(2-3), 225-236.
- Uchiyama, K. P., & Radin, J. L. (2009). Curriculum mapping in higher education: A vehicle for collaboration. *Innovative Higher Education*, 33(4), 271-280.
- Vermette, P. J., Jones, K. A., & Jones, J. L. (2010). Co-teaching in the university setting: Promise and practice in teacher education. *National Teacher Education Journal*, 3(3), 49- 57.
- Walsh, L., & Kahn, P. (2010). *Collaborative working in higher education: The social academy*. New York, NY: Routledge.

- Walsh, M. E., & Park-Taylor, J. (2003). Comprehensive schooling and interprofessional collaboration: Theory, research, and practice. *Yearbook of the National Society for the Study of Education*, 102(2), 8-44.
- Wang, L. (2011). An information literacy integration model and its application in higher education. *Reference Services Review*, 39(4), 703-720.
- Waugaman, W. R. (1994). Professionalization and socialization in interprofessional collaboration. In R. M. Casto & M. C. Julia (Eds.), *Interprofessional care and collaborative practice* (pp. 22-31). Pacific Grove, CA: Brooks/Cole.
- Weetman, J. (2005). Osmosis—Does it work for the development of information literacy? *The Journal of Academic Librarianship*, 31(5), 456-460.
- Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.
- Wenger, M. S., & Hornyak, M. J. (1999). Team teaching for higher level learning: A framework of professional collaboration. *Journal of Management Education*, 23(3), 311-327.
- Whetten, D. A. (1981). Interorganizational relations: A review of the field. *The Journal of Higher Education*, 52(1), 1-28.
- White, D. Y., Pearson, C., Ratliff, J., Hillsman, S., & Miller, G. T. (2001). Negotiating a river: Four reflections on collaboration. *The Teacher Educator*, 37(1), 58-74.
- Wilson, V.A. & Martin, K. M. (1998). Practicing what we preach: Team teaching at the college level. Muskingum, OH: Muskingum College. (ED 417172)

- Winner, M. C. (1998). Librarians as partners in the classroom: An increasing imperative. *Reference Services Review*, 26(1), 25-29.
- Witek, D. (2016). Becoming gardeners: Seeding local curricula with the ACRL Framework for Information Literacy. *College & Research Libraries News*, 77(10), 504-508.
- Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *The Journal of Applied Behavioral Science*, 27(2), 139-162.
- Wright, L., & Williams, G. H. (2011). A history of the embedded librarian program at Odum Library. *Georgia Library Quarterly*, 48(4), 7-11.
- Zurkowski, P. G. (1974). *The information service environment: Relationships and priorities*. Retrieved from <http://files.eric.ed.gov/fulltext/ED100391.pdf>

## **Appendices**

### **Appendix A: Interview 1**

General questions focusing on the quality and characteristics of the teaching partnership and their role and motivation for participation. In addition, follow-up questions may be asked for clarification and/or to ensure understanding.

- 1) Briefly describe your team teaching project with <partner>. (context)
  - How did you become involved in the course(s)?
  - How did you meet your teaching partner?
- 2) How does this team teaching role factor into your other work / course load?  
(context, social vehicles)
- 3) Have you had other team teaching experiences? If so, please describe them.  
(context, engagement)
- 4) What is your primary motivation for being part of this team teaching relationship?  
(engagement, social vehicles)
- 5) What is your understanding about the role you have in the partnership? What is your understanding of your partner's role? (context, practice)
- 6) What is your role so far in planning the overall curriculum, assignments, and syllabus for the class? (practice, context)
- 7) How would you describe the exchange of ideas between you and your partner in this planning phase? (dialogue)
- 8) Please describe a typical planning meeting or discussion. (practice, dialogue)
  - How is the agenda set?

- How are tasks divided?
  - Do you set deadlines?
- 9) How would you describe yourself as a teacher? (context, engagement)
- What is your teaching philosophy?
  - What are your goals as a teacher?
- 10) Please describe a typical teaching session for you as an individual teacher.  
(practice)
- 11) Please describe the course content and assignments for the course that's being  
team taught. (content, practice)
- What are your learning outcomes?
- 12) What teaching techniques are you planning to use in the course?
- Lecture? Active learning?
- 13) Please tell me about the two sessions that I will be observing.
- What are your learning outcomes for the class sessions?
  - What activities are you planning?



## **Appendix B: Interview 2**

General questions focusing on their expectations and overall feelings about the team teaching relationship. In addition, follow-up questions may be asked for clarification and/or to ensure understanding.

- 1) Do you have any thoughts from the previous interviews or observations that you would like to address?
- 2) What were your expectations for what collaborating with a faculty member (librarian) would be like? Were your expectations met? Why or why not? (practice, engagement, social vehicles)
- 3) What did you enjoy most about collaborating with \_\_\_\_\_? (practice)
- 4) Did you have any communication issues in team teaching with \_\_\_\_\_? If so, how did you handle those issues? (dialogue)
- 5) What words or metaphor would you use to describe this team teaching experience? (context)
- 6) Were your colleagues supportive of you engaging in this team teaching project? Why or why not? (social vehicles)
- 7) Was administration supportive of this project? Why or why not? (social vehicles)
- 8) How does your institution support or not support co-teaching? (context, social vehicles)
- 9) What are the benefits of collaborating with colleagues who are educated and trained in a field different from your own? What are the challenges? (context, practice)

- 10) Do you believe that my presence or the research process had any impact on your team teaching experience? Please describe. (practice)
- 11) Do you have any additional information you would like to share concerning this team teaching experience?
- 12) Do you have any questions for me?

### **Appendix C: Interview 3 Joint Interview**

General questions focusing on the observations (additional questions will be generated during the observations) and their understandings of the team teaching experience. In addition, follow-up questions may be asked for clarification and/or to ensure understanding.

- 1) Reflecting on the two classes that I observed, how did you decide on the structure for those classes? (practice)
- 2) During the observations, I noticed you both used \_\_\_\_\_ teaching practices.  
  
Are these the practices you typically use? If so, can you explain your reasons for using these practices? (practice, engagement)
- 3) How would you describe the exchange of ideas between you within the context of the classroom? (dialogue)
- 4) What have you learned from each other about team teaching as a result of this experience? (practice)
- 5) Has this experience led to new understandings related to the course content or your primary field of expertise? If so, please describe. (dialogue)
- 6) In what ways do you think co-teaching has influenced students' learning in the course? (engagement)
- 7) What advice would you give to other faculty and librarians who are considering team teaching? (context, practice)

- 8) In your opinion, do faculty-librarian teaching collaborations have a future in the academy? Why or why not? (context, social vehicles)